"I'M LEARNING NATURE NOW WITH THEM": WHAT CAN A HOLISTIC PERSPECTIVE CONTRIBUTE TO OUR UNDERSTANDING OF THE INFLUENTIAL RELATIONS BETWEEN YOUNG CHILDREN, ADULTS AND A NATURAL ENVIRONMENT?

by

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Abstract

There is a contemporary concern about children's loss of contact with the natural world and its associated benefits. Children's reduced independent mobility is an influential factor and there is growing recognition of an interdependence between child and adult in accessing outdoor play. This research explores a gap in literature through considering impacts on adults in sharing outdoor experiences with children. A Froebelian holistic perspective has been foregrounded within this due to its understanding of child, adult and natural environment relations according to their mutual benefit. This has been investigated though a suburban preschool's organization of family trips to local natural environments. Twelve participant families with children between two and four years old have formed the focus of research activity. A sensory ethnography approach has framed use of child-worn Go-ProsTM on trips and this footage has formed the basis for sensory elicitation interviews with adults. Fifteen hours of Go-ProTM footage have been reviewed along with eleven hours of audio-recorded parent reflections. Analysis of these materials has drawn upon a vocabulary of holistic relations offered by the theory of the evolution of human consciousness (Gebser, 1949). This vocabulary gives equal value to the relational qualities expressed by adult and child (Chawla, 2002) and offers a lens through which to consider Froebelian pedagogical relationships. Findings have highlighted the potential for children to draw adults into immersive sensory experiences, big questions, and storied relations with their immediate surroundings. This can balance an adult potential to draw children towards a capacity for abstract relations with a whole or global context. Each can be considered significant in forming rich, thick, continuous connections between individual and whole and can align with sustainability thinking in a need to act local but think global. Froebelian philosophy may now offer a source of guidance towards an education for sustainable development through a path of familiar early years practices revitalized by a holistic logic.

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Introduction

1.1 A Biographical Motivation

Magic comes right up from your heart because your love is your magic.

(My daughter, BD, aged 7 years old, 2003)

I start with this phrase from my daughter which came as a 'bolt out of the blue' during the chaotic years of raising young children. An observation uttered casually whilst lounging with her brother in a seemingly inconsequential moment that endures and regularly pierces my memory. I quickly scrabbled to write it down in the moment whilst wondering where this thought had come from. It seemed a profound statement, but expressed in such simple terms, with a meaning that surely could encompass us all. I cannot claim to know her meaning but it perhaps highlights the value felt by a young child of warm relations, and an identification of this as a capacity we can hold and express. In parallel with many others, having children has offered an avenue of change for me in doing things differently to experiences of my own upbringing. This might be considered as a creativity integral to having children and its potential as a new beginning, and for some this represents a significant opportunity for pouring one's love into hopes for the future. Its potential as a site for change is gaining recognition, and rigorous studies now dispel a previous belief that "children who are victims of maltreatment in turn grow up to become abusive and neglectful parents" (Jaffee, 2013, p. 54). Instead, it is indicated that this offers an opportunity for a new direction, and that

Safe, stable, nurturing relationships between intimate partners and between mothers and children are associated with breaking the cycle of abuse in families.

(Jaffee et al., 2013, p. 54).

Having children might always be considered as a break point, understood as "a place or time at which an interruption or change is made" (Oxford Dictionary, 2019). Certainly,

having children represents the start of a new generational cycle, and perhaps in this way the opportunity for re-treading a path but with the creative potential of the new.

1.1.1 Child in the Family, Community, Nature, Culture and Society

I had my first two children whilst living on the west coast of Ireland, where I had moved with my partner to escape British city life. We found the potential to make new social connections with other like-minded British 'blow-ins' easy, and there was much novelty to experience in its empty beaches, mountains and wild weather. However, the decision to start a family wrought changes, and we experienced increasing difficulties in securing income and home in this small rural economy. Therefore, after five years of feeling the benefits of open space and a relaxed pace of life, we made the unanticipated decision to move back to the South-East of England. This represented a difficult choice between what we felt were the good qualities of rural life, for the suburban practicalities of a home, income and social support which had become more pressing in the circumstances. I identified a loss associated with the change in environment particularly for the children and their potential to explore and play in open countryside. However, I discerned one saving grace in the move for the children in their access through this to Steiner education. I had been introduced to this on a visit to another county in Ireland and had fallen in love with its orientation to the natural world and children's playful exploration within it. This educational opportunity seemed to offer a means to hang onto a sense of freedom of expression for the children which I felt would be lost by the change in environment.

Our involvement in Steiner education progressed through parent and toddler groups, the children's attendance at a local kindergarten and my own subsequent involvement as an assistant kindergarten teacher. My opportunity to train and work in the Steiner movement followed an engagement in mainstream teacher training, and a qualifying period spent as a reception class teacher in a local primary school. The transition between the stressful responsibility of a mainstream teaching role and the accommodating, gentle daily rhythm of kindergarten life was striking, and I found my time in Steiner education to be a deeply impressive experience. Immersion into the kindergarten's gentle colours, natural resources and gentle pace is perhaps as therapeutic to adults as children, despite the continuing hard work and responsibility associated with this role. However, more

importantly I felt that I witnessed an educational experience oriented to young children's ways of being and needs, and that this sat in sharp contrast with my experiences as a reception class teacher. Rather than seeking to shape children's knowledge and development, I experienced a more harmonious meeting between young child and world, and this was through an educational process described as learning to be truly human (Steiner, 1909).

1.1.2 The Steiner Holistic Educational Model

Steiner education is underpinned by the spiritual philosophy of Anthroposophy, which understands human life as spiritual learning in an earthly realm. The arising educational approach can be understood as holistic, and this aims to take account of "the whole child" and the interdependence of their physical, emotional, social, spiritual and cognitive development (Steiner Waldorf Schools Fellowship (SWSF), 2011). Different aspects of this are understood to 'unfold' as the child ages, and up to seven years the primary concern is their physical development. A young child is described as living in a state of 'bodily religion' (Steiner, 1996) and this conveys an understanding that young children are sensorially open to their environment, their experiences are constitutionally formative, and this gives rise to kindergarten practice described as "sensory nutrition" (Oldfield, 2001, p. 103). Nature is understood as an expression of spirit in physical form, and that the key learning for young children resides in their developing sense of feeling at home in the world. Kindergarten activity therefore aims to weave the child's experience into relational connection with surroundings through daily rhythms of indoor and outdoor routines. The curriculum follows the seasonal patterns of the year and there is a conscious bringing of the beauty of nature to children with awe and wonder (SWSF, 2011). The significance of these experiences is described in the following terms:

The world and the individual spirit meet at the doorway of the senses: the world enters, makes its mark, and then we go out to recreate the world anew.

(Oldfield, 2001, p. 104)

The role of the adult within this process is described as "guiding children gently into life, by allowing them to learn from life for life" (Jaffke, 1991, p. 11), and young children are

understood to learn in whole bodied ways and primarily through imitation. This is a very different understanding of learning to that in current UK mainstream schooling in which there is a curriculum primarily focused on skills to be achieved and a developmental timeframe.

Despite a strong affinity with Steiner education and an appreciation of its value for children, I made another difficult choice and that was to return to mainstream education. This was due to difficulties experienced in the disjuncture between Steiner education and surrounding culture, and the effects this could exert on human activity within its practices. Difficulties arose in conveying educational priorities so different to those in the prevailing system and could give rise to a defensiveness that I felt threatened its spiritual intentions. Meeting both its own educational priorities and those required by the EYFS could create additional work and tensions in addressing the divide. However, I was at the same time observing a growing interest in the types of educational activity offered by Steiner education within wider mainstream practice, and this included outdoor learning and the use of 'loose part' natural materials for creative play. I started to wonder if there was the potential for bridge building between these two practices, and having worked in mainstream education, felt comfortable to traverse this seeming divide. The Steiner movement seemed to be defined by its alterity and motivated to seek to maintain this position. However, I identified support for a choice to explore my own path in the suggestion that we should "test everything in the light of healthy reason" (Steiner, 1909), and I felt this to be relevant to my own life-long learning. I purposefully chose to remain in early years education as I believed the EYFS (2017) offered greatest scope for accommodating broad educational influence. This can be understood as partly due to the influence of young children, whose developmental state is more strongly driven by an impulse to act, rather than a capacity for impulse control (Power and Chapieski, 1986). At a personal level, this choice to pursue what I identified as child centric education represented an aspect of my drive to do things differently to my own childhood experience. I felt that I could pursue this not only in relation to my own children, but also within an educational approach that listened to children's voice and considered this in relation to life in holistic terms.

1.2 Building Bridges Across Diverse Early Years Practice

I chose to pursue the potential to bring influence from Steiner philosophy into mainstream education through private voluntary independent (PVI) settings as I believed these offered greatest scope for flexibility in practice. Although I found this to be true in relation to my own freedom to act, I found challenges in the two settings I subsequently managed due to a lack of up-to-date training in staff. This manifested in a lack of insight into the value of outdoor learning for young children and was evidenced on joining both settings in staff-identified behaviour issues in children they did not know how to address. Therefore, when joining these settings as a manager I prioritized children's outdoor access as this offered the most direct route to meeting young children's play needs. Outdoor play also offered the quickest route to nature contact as is central to Steiner education, if only initially through fresh air and the seasonal changes in surroundings. As an immediate change in provision, this could support staff insight into the significance of outdoor play, and this was through witnessing children's behaviour in a different context.

On transitioning into my second management role in a new setting, I gained support for my own developing practice through an MA in Early Years Education. This introduced me to action research as a supportive structure for working with staff teams in improving practice together, and I identified staff motivation for outdoor provision as a priority to address. I initiated this in the second setting through inviting a staff reflection on their favourite childhood places to play. A subsequent discussion around this in a staff meeting illuminated the significance of outdoor space in their own childhoods. In arising discussion staff talked about changes over time and its impact on children's current opportunities for similar experiences. These insights formed the basis for developing the outdoor provision, and its staffing as free-flow indoor and outdoor play. The staff discussions around changing outdoor play cultures also highlighted a significance in partnership working with parents, and a second action research cycle sought to build on this through development of family involvement practices. This action research cycle initiated with a parent questionnaire in which they indicated that outdoor play was valued but that there were barriers in time availability and access to suitable local space. Impacts were identified from continuing housing developments that were eroding previously accessible green open spaces. The second action research cycle continued by exploring the potential for our educational practice to promote children's outdoor play through takehome outdoor resource bags. These aimed to support engagement in outdoor play through making activity accessible, and this could be in incidental spaces such as their walk to pre-school.

It was in this second action research cycle that the potential for children to influence adults in natural environments started to come to light. Insight arose whilst first practicing the activity at the setting, so children could lead in the use of resource bags when they took them home. Activities were first carried out by staff with children in a little-used green space beside the pre-school, and it was whilst observing this activity that I started to notice children's influence. Adults initiated by introducing the activity which the children enthusiastically engaged with. However, once the activity had run its course, children started to lead adults through their own engagement in activity in this new space. The child-led engagement drew staff into imaginative and physical engagements with surroundings, and this influenced adult activity in the moment and also our subsequent perception of the potential offered by this space (Watts, 2017, unpublished). This observation was also joined by the resource bags being well-engaged with by families, who shared this in the scrapbooks that formed part of this resource. The action research cycle seemed to highlight the potential for educational practice to promote connective relations, and this was between children, adults, outdoor spaces, early education and local community.

1.2.1 The Holistic Roots of Contemporary Early Years Education

As my MA ended the opportunity arose for pursuing Froebel Trust PhD funding, and on my first reading of 'The Education of Man' (Froebel, 1887) I discovered a philosophy with parallels to Steiner education. Both orient to a holistic conception of the individual as simultaneously expressive of a continuous divine whole, and that this gave rise to a pedagogy to support human development in these terms. The significance of a holistic world view can be understood to frame both an understanding of the historical development of all life, as well as a philosophy by which to consider one's own experiences. The natural world holds a significant role within this, and for Froebel this was described as the "external form in which man's destiny is expressed" (Froebel, 1887, p. 42). The individual experiences an encounter with the world through their "senses, the

organs that enable him to meet that invitation" (Froebel, 1887, p. 42). Early childhood is foundational and gives rise to a pedagogy which parallels Steiner education in placing an emphasis on children's engagement with the natural world. However, although there are some comparisons to be made between the holistic perspectives of Anthroposophy (Steiner) and Life-Unity (Froebel), I discovered a new pedagogical interpretation in Froebelian ideas. One notable difference lay in an understanding of the pedagogical relationship between adult and child. In Steiner education the adult role is primarily as protective mantle to the young child, but for Froebel the adult is not only protective to the new life of the child but also open to a learning from this too. This is described according to the suggestion:

"Let us live with our children: then will the life of our children bring us peace and joy, then shall we begin to grow wise, to be wise."

(Froebel, 1887, p. 89)

Reading this philosophy in the light of my recent action research prompted a reflection on the effect I had observed young children having on adults in the preschool green space. The children's playful physical and imaginative engagements with surroundings had influenced adult activity and our subsequent perception of the opportunities offered by this space (Watts, 2017). I wondered if there was scope for further exploration of young children's influence on adults in natural environments, along with the role of early years education in supporting this through its family involvement practices.

One of the changes to practice I had established whilst manager at this setting, had been the initiation of family trips to local parks and nature sites. The trips were influenced by Steiner kindergarten practice in which outdoor seasonal festivals are celebrated in building community and weaving families into relations with the natural world. I wondered if there was scope to develop this as pre-school practice through a year of family trips to local nature sites, as means for further research into children's influence on adults in such environments. Previous pre-school trips had promoted access for all families through the organisation of lift-sharing, and this held local relevance due to the impact's families identified in accessing local green spaces. Given these identified local barriers, I wondered if there was a significance in exploring the role of early years education in promoting environmentally and socially connective activity with families.

This involved a shift in the role of early education away from provision purely for children in the setting, and towards consideration of their wider connective relations with family, community and environment. My personal and professional experience in early education gave insight into the continuing significance of these interconnections for young families, and this seemed to align with the Froebelian principle promoting the "relationship of every child to family, community and to nature, culture and society" (The Froebel Trust, 2020). I wondered if a call to "Come, let us live with our children" (Froebel, 1887, p. 89) still offered a relevant message in our contemporary environments that were characterised by barriers to our experiencing of them? This could be considered in connection with a second Froebelian principle promoting respect for "the integrity of childhood in its own right" (The Froebel Trust, 2020). The organisation of family trips to local nature sites could offer the means for a focus on both Froebelian principles, in the connective role of early childhood education and influence of child through these relations.

My own biography seemed significant in having been drawn to holistic philosophies in seeking to attend to children's voice. Personal experience of having young children, and professional awareness of young families gave me insight into the continuing importance of socially and environmentally supportive connections. My background and the awareness that it gave seemed to coalesce in framing my current circumstances as pertinent for exploring Froebel's message. An understanding of adult and child relations according to mutual benefit could offer a new contribution to thought relevant to contemporary conditions and be highlighting an opportunity within them. This was for adults to be learning from children just as much as children can be learning from adults. Such a message was conveyed in the suggestion that "With all our knowledge, we are empty for our children", but that children can "give meaning to our speech and life to the things about us!" (Froebel, 1887, p. 88). A holistic conception of life could offer a very different lens through which to consider our current social, environmental and family lives. This was according to the potential for supportive connections between them, with influence in all directions across these and for this to be sustaining to the life that ran through them all.

1.3 The Contemporary Significance of Child, Adult and Natural Environment Relations

Children's contact with nature is identified as a significant issue for address in current public policy. This is driven by an awareness of the impacts of children's loss of independent mobility accompanied by growing insight into the benefits of nature contact (Defra, 2018, Defra, 2011). Research evidence demonstrates that children's nature contact can contribute to physical, psychological, social, and emotional health with the potential for impact across the lifespan through developmental association (Adams & Savahl, 2018, Pretty et al, 2009). The potential for health benefits beyond this are also highlighted in associations between childhood experiences in nature and proenvironmental attitudes and behaviours in adulthood (Wells & Lekies, 2006). This understanding of reciprocal human-environmental health finds expression in current UK policy that recognises a need for managing our human impact on the environment and delivering environmental outcomes (Defra, 2020). Such policy interest has been linked with an identified need to effectively measure 'nature connectedness' as a psychological construct important to both human and environmental health (Richardson et al., 2019). The measure is outlined in terms of our affective, cognitive and experiential domains and concerns "an individual's sense of self where nature and humanity are one" (Schultz, 2002, p. 61). The child and nature problem are thereby highlighted as important to address as this offers greatest scope for long-ranging impacts through human-environment relations.

The barriers to children's nature contact are identified as a complex combination of environmental and cultural factors, and these are increasingly positioning adults as gatekeepers to children's outdoor play. These conditions are summarised as changes to the "culture of childhood" and to the "cultures, opportunities and controls that children and young people live and play in" (Thompson, 2011, p. 19). This scenario is summarised in terms of the following factors:

"Some of these obstacles are cultural or institutional – growing litigation, educational trends that marginalise direct experience in

nature; some are structural – the way cities are shaped. Other barriers are more personal or familial – time pressures and fear".

(Louv, 2005, p. 115, cited by Moss, 2012, p. 12)

It is children's potential to move freely around the localities in which they live that has been eroded. Contributory factors include increased traffic levels, attitudes towards risk in children's activity, fears about stranger-danger, obstructive authority attitudes and the influence of the media on public perceptions of safety (Moss, 2012, Thompson, 2011, Moore, 1986, Matthews, 2000, Dept. of Health, 2009). However, what is discerned as running through all barriers to children's freedom is a sense that "those of us who have erected them have usually done so with the best of intentions" (Louv, 2005, p. 115). These intentions for the best for children are described as having taken shape as a 'culture of fear' (Thompson, 2012) and have created a scenario in which children no longer stray far from home, and if they do so, it is in the company of adults. Through this, children are losing the opportunity both for a freedom of self-expression, as well as the potential for an experience of their surrounding world.

The Monitor of Engagement with the Natural Environment Reports (Natural England, 2019) have demonstrated that children's visits to natural environments in the UK are increasingly mediated by adults. The adults are predominantly those from the child's household, and relatively few visits to natural environments are by unaccompanied children. Monitoring over the past six years has indicated a "decline in the proportion of children spending time outside, particularly for children spending time outside independent of adults" (Defra, 2019, p. 18). The implications from this are determined in a need to take "a wider view of the barriers to visiting amongst the whole family including both the adults and children" (Defra, 2019, p. 12). Monitoring demonstrates that for children in the UK "their main experience of the natural environment is close to home, in green spaces within towns and cities" (Defra, 2019, p. 18). It is therefore important that initiatives aiming to increase opportunities for children to visit nature should consider "the needs, motivations and benefits for the family, and extended family, as a whole" (Defra, 2019, p. 18). However, although there is growing recognition of an interconnectedness in child, adult and natural environment relations, there remains a gap in current literature considering benefit to adults through such experiences. Nature

connectedness is primarily considered in terms of its presence in adults and influence from this on children's contact and connection with nature (Passmore *et al.*, 2021). However, this thesis will explore the potential for positive impact through current conditions in which adults are now experiencing more shared interactions with children in outdoor spaces. This has been investigated through a foregrounding of Froebel's holistic philosophy through which childhood ways of can be valued alongside the adult ways of knowing they will 'become'.

These considerations highlight the potential role of early education in supporting the child in relation to their whole context as promoted through Froebelian educational principles. Early Years settings may be well-situated for addressing these wider barriers to nature contact, as community-based services working with young children and their families. Family-inclusion practices can engage with the wider context of relations relevant to children's lives and start to shift education towards more socially and environmentally integrated practice (Defra, 2019). This would shift the focus of educational activity away from the child in the setting, and towards an understanding of their healthy development as interdependent with their wider relational context. This thesis considers the contemporary contribution of Froebelian pedagogy within current conditions. This is though activity that has explored the contribution of a holistic perspective to our understanding of the influential relations between young children's adults and a natural environment.

1.4 A Guide to the Thesis

This thesis outlines a current concern about children's contact with the natural world, and the ways in which adults are implicated in this relationship. The second chapter gives an overview of the benefits, barriers and facilitators to these relations identified in contemporary literature. Barriers are highlighted in the environments that families live in and their time-use within them, and benefits in both human and environmental terms. Facilitators to children's contact with nature have been discerned through the lenses of evolutionary, ecological, embodied and new materialist perspectives. This literature is building insight into a problem that pertains to individual experience but is connected to whole planetary health. This is therefore a problem relevant to address in support of a

sustainable future, and current conditions are implicating adults in this alongside children. It is this scenario that Froebelian pedagogy highlights in terms of its mutual benefit and is the contribution to contemporary thought explored in this research. The third chapter outlines the holistic paradigm underpinning Froebelian philosophy which can be understood as an orientation towards a vision of the whole and its connective parts. Holism is outlined according to the potential for a contemporary paradigm shift through which aspects of life currently understood according to separation can be reconnected. Such a shift can be considered as relevant to local conditions and global contexts, as well as to the development between childhood and adulthood. Froebel's message has been contextualised by a more recent holistic perspective in the theory of the evolution of human consciousness (Gebser, 1949). This has offered a vocabulary of holistic relations that can encompass child, adult and culture and give them all equal value. The fourth chapter outlines sensory ethnography as the methodology adopted in this research, which is emergent out of a contemporary interest in sensory knowledge. This reflexive method explores the potential for new ways of knowing offered by digital-media and this has framed use of child-worn Go-ProsTM during family trips to natural environments. Footage from the child's perspective has formed the basis for adult reflections, and analysis of this whole process has drawn on Gebser's theory as a holistic lens. Chapters five to nine outline what has been illuminated through use of this lens and considers what this can demonstrate within influential relations between child, adult and environment. The final chapter reflects on what Froebelian pedagogy can offer in a contemporary context, through its orientation to whole relations and significance of the child in its midst. This contribution is highlighted in a potential to link our most immediate experiences to a whole life context, and the opportunity to experience this through given conditions and in any moment.

2 Literature Review

2.1 Introduction

The following chapter defines what can be understood by a young child, an adult and natural environment as foundations for considering how their influential relations are currently understood. A complex historical interplay between humanity and environment is illuminated that continues to evolve and be influential on these relations. This broad context now frames current concerns about children's loss of contact with nature, and the problem will be outlined according to identified barriers and facilitators. Although concerns are currently focused on the child, research highlights the significance of wider social and environmental relations. These conditions situate children in terms of an increasing dependence on adults in accessing outdoor play and are highlighting the significance of broader relations in promoting child and nature contact. A key role is identified for education and current policy is emphasising the importance of considering whole family needs. An overview will be given of the recent perspectival turns through which child and nature relations have been considered, and these will be framed with a question about their orientation to human life considered in individualised terms. This can be understood as an underpinning paradigm and framed with a consideration of what might be offered by its shift. Insight into the difference between considering human life according to an individualised or holistic paradigm will be supported by the theoretical discussion that follows in chapter 3.

2.2 A Definition of Relational Terms

2.2.1 A Child

A biological definition of a child is a person between birth and puberty (Mosby, 2013), but this research focuses on children between two and four years old. Contemporary understandings of the child have been shaped through discourses in psychology, biology, medicine, and neuroscience, and these have framed childhood according to the

developmental changes of this period. These perspectives have shaped the mapping of child development from a state of infant dependence towards an increasing autonomy in their physical, psychological, and emotional domains (Santrock, 2006). Child development has been primarily considered in terms of genetically controlled maturation, the influence of environment and learning and an interaction between the two (Lindon & Brodie, 2016). Such considerations have shaped an understanding that although there are predictable sequences of development, that each child will follow a unique course (Lindon & Brodie, 2016, Keenan *et al.*, 2016). The children within this research are in their 'early years' understood as a period typically characterised by a rapid rate of development across all domains. In England, understanding of these changes is charted in an Early Years Foundation Stage Curriculum Framework (DfE, 2020) and this represents the statutory guidance for children's education up to five years old.

2.2.2 An Adult

A biological definition of an adult is an organism that has reached sexual maturity (Landau, 1986, Koenisberger, 1989), and represents the consideration of aging as a biological process towards a state of physical maturity. At different stages in history and across different cultural contexts, adulthood has therefore been considered as starting at puberty with a change in status marked by a 'coming of age' test or ceremony (McNamara, 2004). However, there has been an impact from the defining of adolescence (Hall, 1904) which gave rise to consideration of a transitional period of physical and psychological development between puberty and the age of majority (MacMillan Dictionary, 2020). The age of majority can be understood in terms of a greater number of years, and it is when an individual is regarded as independent, self-sufficient and responsible (Family Law Reform Act, 1969). This is in opposition to a 'minority' of years and thereby terminates the responsibility held for an individual as minor by their parents or guardians. The Family Law Reform Act (1969) offers an illustration of a shift in definition over time in the UK, through its marking of a change in the 'age of majority' from twenty-one to eighteen years old. A social sciences perspective has framed adulthood as a social construct, as its conception depends not only on universal phenomena but also that which is culturally defined (Ryff, 1985).

2.2.3 Child and Adult as Social Constructs

An understanding of 'childhood' as socially constructed has been highlighted from a contemporary childhood studies perspective. This has sought to challenge a dominant framework of developmental psychology which has placed focus on childhood as a process of 'becoming' an adult, and thereby positioned children according to an 'incompetence' and 'incompleteness' (James & Prout, 1997). Instead, there is the assertion that children should not just be considered as "adults-to-be, but as people in their own right", and that this gives value to children's ways of 'being' as "worthy of study in their own right" (Thomas & Stoecklin, 2018, p. 36). This forms the foundations in advocating for children's rights as social actors (Thomas, 2018, James and Prout, 1990), and highlights impacts from the juxta-positioning effect created through social constructions of 'childhood' and 'adulthood'. These can be understood to have an influence not only on children, but on adults in relation to this too. Burman (2008) has described a culturally promoted image of 'child as fetish' which positions both children and adults according to 'bipolar dimensions' of innocence and experience, dependence and autonomy and spontaneity and reflection. Such understandings are suggested to occlude realities in which children may be assigned a sense of freedom that "they may not themselves feel" (Burman, 2008, p. 146) while as adults "our own hold on received versions of maturity and competence is so fragile" (Burman, 2008, p. 176). Such perspectives frame the suggested need for a disruption and displacement of such positionings (Burman, 2008) and the potential instead for a more broadly considered notion of competence (Uprichard, 2008). It is suggested that

"We are all - children and adults - interdependent beings who are also always in the process of 'being' and 'becoming' with one another, who are more or less competent at doing certain things throughout our lives".

(Lee, 2002, in Uprichard, 2008, p.7).

The childhood studies perspective questions some fundamental assumptions about whether "competency is necessarily (and only) an adult characteristic" (Uprichard, 2008, p. 4), and in 'an age of uncertainty' (Lee, 2002) offers an opportunity to explore whether

"both children and adults can be both competent and incompetent depending on what they are faced with" (Uprichard, 2008, p. 4). Such a perspective raises questions about cultural values and the clear certainties provided by universal models and promotes a transitional period that can enable us to "learn to live with the tensions" (Burman, 2008, p. 179). These views frame current conditions as fertile grounds for exploring influence between children and adults, and to consider that it is not only adults that shape children's development but also children who beneficially influence adults. Such a framing can shift a valuing of adult capacities as superior and children's capacities as less important and therefore to be discarded along the way on a developmental path. Instead, there is the potential for an appreciation of our fullest relational capacities and what these might offer in meeting evolving circumstantial needs. This view holds relevance in considering how the contemporary child and nature relationship might best be served and will be highlighted in this thesis according to current understandings of this problem.

2.2.4 A Natural Environment

A scientific definition of a natural environment is given as "one relatively unchanged or undisturbed by human culture" (Johnson *et al.*, 1997, p. 582), and aligns with a biological definition which includes "all living and non-living things that occur naturally on a particular region" (Biology Dictionary, 2020). Such an understanding is qualified by the assertion that although humanity can be understood as part of nature, that there should be a clear differentiation from their outputs as an advanced material-technological culture. Following this logic, a non-natural environment is one "relatively changed, modified, disturbed, or created by our cultural activities" (Johnson *et al.*, 1997, p. 582), and this aligns with the understanding that although humans are an organic species, the environmental effects of our culture are not. This understanding is congruent with normal usage and with dictionary definitions of "natural as it appears in environmental contexts" (Johnson *et al.*, 1997, p. 582). The Natural Environment Scoring Tool (NEST) (Gidlow *et al.*, 2017) offers an example of a contemporary operational usage of this term and highlights a demarcation between an 'objective sense' of nature and the use of this term 'in practice'. In an 'objective sense' nature is defined as

"The physical features and processes of nonhuman origin that people ordinarily can perceive, including the "living nature" of flora and fauna, together with still and running water, qualities of air and weather, and the landscapes that comprise these and show the influence of geological processes."

(Hartig et al., 2014, p. 208)

However, Hartig et al. (2014) assert that this term can be used differently 'in practice', and this is in referencing sites that facilitate human access to natural elements in built environments. In this usage an "exclusion of the artificial" (Hartig et al., 2014, p. 208) no longer stands as a defining feature, and a 'natural environment' can then refer to places that "appear natural and provide. opportunities to engage with and follow natural processes, but...are typically designed, constructed, regulated, and maintained" (Hartig et al., 2014, p. 208). Such sites might include allotments, canals or urban parks, and in the NEST urban design tool this is used "as a catchall term for green and blue space, which is often located (and created by humans) in urban areas" (Gidlow et al., 2018, p. 324). 'Green space' refers to "patches of vegetated land", and 'blue space' to "visible water" and these are terms associated with contemporary urban planning practices aimed at greening urban infrastructure (European Commission, 2013). This tool aims to support understanding of "the value of the benefits that nature provides to human society" which can be combined with "protecting and enhancing nature and natural processes" so that both are "consciously integrated into spatial planning and territorial development" (European Commission, 2013, p. 2). These understandings demonstrate current considerations of human-environment relations which can be understood as having been subject to fundamental shifts over time.

2.2.5 Nature as a Social Construct

A consideration of historical semantics frames 'nature' as one of the most complex words in the English language and has carried over many years "major variations of human thought" (Williams, 1992, p. 224). There are three different contemporary operational understandings of the word 'nature', and these are suggested to embody three major historical shifts in world view. The understanding relevant to a natural environment is

that of the "the features, forces, and processes that happen or exist independently of people" (Cambridge Dictionary, 2020) or "the material world itself" (Williams, 1992, p. 219). This is linked with influence from the Enlightenment period and the perspective promoted by Cartesian dualism. The second understanding of 'nature' is that of "the inherent force which directs either the world or human or both" (Williams, 1992, p. 219) and a contemporary understanding of this is identified in terms of "the type or main characteristic of something" (Cambridge Dictionary, 2020). This understanding is suggested to be linked to the religious beliefs of the fourteenth century, through which life started to be considered as emanating from a single source or 'God'. The third understanding of 'nature' is used in referencing "a person's character" (Cambridge Dictionary, 2020), and this can be linked with a prior thirteenth century religious belief in life as a 'Great Chain of Being'. This gave rise to a sense of 'nature herself' as "an amorphous all-powerful creative and shaping force" (Williams, 1992, p. 221) that expresses itself in and through all of life's individual forms. These three understandings of 'nature' are therefore linked with three differing world views, and as they continue to be operational suggests that these all retain some sense of meaning within human experience. All refer to a sense of life and considerations of its potential source and demonstrate a human need to acknowledge the fundamental ways in which this is experienced. These different understandings of 'keywords' demonstrate an historical progression through paradigm shifts, but a continued engagement with fundamental questions. These fundamental needs and questions can be considered as relevant to a child and nature problem and a concern about the qualities experienced and expressed through these relations.

2.3 The Child, Adult and Natural Environment Relationship Problem

There is a contemporary concern about children's loss of contact with nature. This is identified as a problem associated with the changing nature of environments we live in and its impact on children's direct contact with the living systems of our world. The barriers to children's contact with nature are identified as a complex combination of opportunity and orientation related factors (Soga *et al.*, 2018). These relate both to the constitution of living environments and our human behaviours within them and the ways in which these can influence each other in ongoing ways. This is a problem being highlighted for address due to an accumulating body of research evidencing its associated benefits (Chawla, 2015). Children's reduced independent mobility is identified in terms

of a loss of outdoor play as a childhood experience, and a growing body of research evidence identifies links between this and multiple dimensions of physical and mental health (Chawla, 2015, Pretty et al., 2009). Through developmental association, such experiences can have impacts across the lifespan, and potentially beyond this through links between childhood experiences in nature and adult pro-environmental attitudes and behaviours (Pretty et al., 2009, Wells & Lekies, 2006, Passmore et al., 2020). This is a problem that has been elevated in public consciousness through terms such as 'naturedeficit disorder' which can be understood as an "increasing divide between the young and natural world, and the environmental, social, psychological, and spiritual implications of that change" (Louv, 2005, loc. 154). Such awareness has been raised in western world contexts through contrasts between memories of past childhood and awareness of current changes to living conditions and childhood possibilities between one generation and the next. Understanding of the opportunity and orientation-related factors acting as barriers to child and nature relations will now be outlined, and although identified separately, these are also understood according to ongoing influence between them. A picture arises of human-environment relations that are essentially interconnected, and this shapes the assertion that "there can be no simple, straightforward way to promote children's nature experiences" (Soga et al., 2018, p. 114). An outlining of current literature insights will be followed by an overview of the perspectival turns through which this problem has been conceived and the measures for its address that this has given rise to.

2.3.1 Opportunity-Related Factors

2.3.1.1 Urbanisation

Children's loss of contact with nature is identified as a symptom of urbanisation (Soga *et al.*, 2018, Cox *et al.*, 2016). Urbanisation is a complex process of change through which there is a "progressive concentration of people and activities in towns and cities, thereby increasing the general scale of urban settlement" (Witherick & Small, 2001, p. 280). At present fifty-five per cent of the world's population live in urban environments, and this is projected to rise to sixty-eight percent by 2050 (UN, 2020). This is a process playing out at global scale and understood as the context for impacts from global and local ecosystems which "play an increasingly important role in public health" at the "interface between urban poverty, environment and health" (WHO, 2020). Children's identified loss of contact with nature is situated within these conditions and can be understood as the

consequence of changing human lifestyles and their impacts on biodiversity at local scale. This development is described in the following terms:

"As cities grow, vital habitat is destroyed or fragmented into patches not big enough to support the complex ecological communities of plants and animals that once lived in those places"

(Duhn et al., 2017, p. 1364).

The new living conditions created are characterised by the quality and distribution of space, and issues of power inequality and access enabled or denied through human activity (see section 2.3.1.3). The effects of urbanisation are experienced not only within towns and cities but also in the surrounding areas forming the overall environmental context. Rural areas hold the potential to be abandoned and can be associated with losses of infrastructure, community cohesion and an over-reliance on cars (Duhn et al., 2017, Skar et al., 2016). Such space might seem to offer an opportunity for natural ecology to be restored, however this too can be occupied by corporations that move in and further deplete the quality of the environment (Simms, 2009, Duhn et al., 2017). Suburban spaces are areas that lie beyond urban boundaries, and these can be occupied by low-density development and be associated with the urban 'sprawl' (Jaret et al., 2009). Suburban development is associated with a lack of limits to expansion, mixed use of land and a lack of centralised responsibility for planning (Downs, 1997). This description is relevant to the context of this research which is situated on the outskirts of a town currently undergoing expansion in urban infrastructure. Developments are continuing to transform this former village through an increasing density of suburban development, and families are identifying impacts in this process on their access to green space. This research context can be considered in relation to an ongoing complex picture of urbanisation. Such complexity involves the potential for "new 'oxymoronic' events" to occur including the development of "biodiversity hotspots in inner city environments where highly endangered species appear at a greater rate than elsewhere in the landscape" (Duhn et al., 2017, p. 1364). The contextualising issue of urbanisation might therefore be considered according to ongoing question of balance between human activity, the needs of wider life and the space in which this occurs. It is this delicate balance that provides the context of children's nature contact and represents an ongoing interplay between humanity and wider life. However, although urbanisation is enacted by humanity, it has been with

limited awareness of impacts, and these can be considered as equally relevant to humanity, wider life and their ongoing interconnection.

2.3.1.2 The Extinction of Experience

Impacts from changing environments are recognised in the emotional, social, and physical experiences of those living within them. Such impacts are described in terms of a "socio-technical experience" that leaves the "vast majority of urban citizens systematically deprived of in situ nature experiences" (Guisti *et al.*, 2014, p. 17). A loss is identified in the potential for "direct, intimate encounter with places and organisms" (Pyle, 2003, p. 209) and gives rise to an 'extinction of experience' at individual and community scale (Pyle, 1978). Its ongoing consequences are recognised in "a cycle of loss and disaffection" (Pyle, 2003, p. 209) described in the following terms:

"As the richness of the neighbourhood diminishes, the power of the neighbourhood to fascinate, arouse, excite, and stimulate also passes into dullness, ennui, and apathy. Those who know and recognize less, care less, and therefore act less, leading to still more losses."

Changes to environmental qualities and the human responses they support are recognised as a loss to the connective foundations underpinning their healthy relations. Changes to experience are identified in 'specific qualities of attention, ways of learning and thinking about the natural world', which are instead replaced with "extensive and often passive consumption of technology, an over-emphasis on the 'written word,' and indoor educational settings" (Thomashow, 2002, p. 81). The overall effects manifest in a human disconnection from nature (Taylor & Kuo 2006, Kahn *et al.* 2009, Louv 2005, Taylor 2013) with an accumulating effect over time described as an 'environmental generational amnesia' (Kahn, 2002). Such a process involves a gradual adaptation to the loss of "actual nature and to the increase of technological nature" and through this humanity lowers the "baseline across generations for what counts as a full measure of the human experience and of human flourishing" (Kahn *et al.*, 2009, p. 37). In this way, environmental degradation can increase, but each generation tends to take that degraded condition as the nondegraded condition, which operates as an ongoing impactful cycle. Humanity adapts behaviourally but pays a price for this in terms of their physical and psychological well-

being. This gives rise to a draw towards "increasingly sophisticated and pervasive forms of technological nature, which will provide some but not all of the benefits of actual nature" (Kahn *et al.*, 2009, p. 41). The effects of human space occupation, technology-orientation and attentional impacts are ongoing, and it is this process that is framing a contemporary concern about the child and nature relationship.

2.3.1.3 Children's Designated Places Within Urbanisation

Urban environments have been primarily developed in accordance with adult perspectives, and although children's needs have been recognised, their consultation in planning has been minimal. Urban development has traditionally envisaged the potential for children's activity to be catered for in designated places such as parks, and with play equipment that recognises children's needs but in adult-envisaged ways (Gill, 2021). As manufactured spaces these are linked with the 'deeper structural issues' intimately bound up with their production, and park distribution and green spaces demonstrate economic spatial and social injustices (Santos et al., 2018, Ahmetoglu, 2017, Duhn et al., 2017, Cox et al., 2016. Loukaitou-Sideris & Sideris, 2009, Karsten, 2006). Issues of accessibility are insufficiently addressed in the mainstream play sector, and it is vital to understand that "the politics of occupying a space are not the background to people's lives, but an integrated part of how they live (and play)" (Santos et al., 2018, p. 368). This issue has been demonstrated in conditions current to this thesis and the effects of the lockdown measures taken in response to the covid-19 pandemic. This has highlighted social disparities in children's access to outdoor space, its impacts on children's active outdoor play and the significance of this to family life (Children's Commissioner, 2020). Such social and economic disparities continue to impact through the maintenance required by manufactured spaces. Broken play equipment becomes dysfunctional and represents a barrier through lack of appeal or sense of safety and this too can coincide with issues of socio-economic deprivation (Loukaitou-Sideris & Sideris, 2009, Karsten, 2006, Santos et al., 2018). This highlights the ways in which urbanisation situates relations between children, adults and natural environment in ways relevant to the suburban context of this research. The interconnection of social and environmental relations is highlighted through impacts on community and family life.

2.3.1.4 A Child-Led Use of Space

Adult-designed playgrounds reproduce the social order, and this can be considered as demonstrated through an adult envisioning of children's needs. Research indicates that within this "functional planning, improvisation often feels unwelcome, and children therefore conform to the established norms of movement" (Pyyry, 2017, p. 1394). Children's play places have been described as "too manicured, chemically treated to offer much interest to the adventuring youngster" (Pyle, 2002, loc. 3929), and it is essentially this spirit of adventure that can be mismanaged through adult-design. This is highlighted through contrast and evidenced in children's behaviours in undeveloped or constructed spaces, that have been variously labelled 'vacant lots' (Pyle, 2002), 'wastelands' (Lynch, 1977, Hart, 1979) or as development progresses, the 'edge lands' (Farley and Roberts, 2012). Such spaces in urbanising contexts can offer children qualities of "wildness, secretiveness, and possibility" (Pyle, 2002, loc. 3763), and perhaps the potential to "be free, to climb trees, muck about, catch things and get wet – above all, to leave the trail" (Pyle, 2002, loc. 3934). An adult impetus to convert space to place has been described in terms of 'civilising forces' (Pyle, 2002), and the expression of a desire to replace that which is 'vacant' with that which is known and controlled. Space not claimed for adult purpose can offer children an open agenda, and this represents fertile grounds for playful activity to emerge. Such conditions have been described as enabling a "fluid transaction between a child's plans and the environment's attractions" (Hart, 1979, p. 158) which in adult-designed places create "untidy results" and can attract "adults' ire" (Moore, 1986, p. 160). Children have been suggested to illuminate an 'alchemy' in their play (Pyle, 2002), and a sense that this fulfils a fundamental human need to "make a world in which to find a place to discover a self" (Cobb, 1949, p. 540). Although adults may recognise a loss for children and describe it in terms of their contact with nature, this may not capture the relational depths as explicitly as children can demonstrate in their play. Urbanisation might be considered as representing barriers to nature in its fullest terms, and that is not only in relation to "the material world itself" but also to "the inherent force which directs either the world or human or both" (Williams, 1992, p. 219). Contemporary conditions for childhood have been emotively described as 'battery-reared' rather than 'free-range' (Palmer, 2006), and this analogous comparison between human treatment of animal life and children might be considered as holding relevance to wider life too.

2.3.1.5 Children's Loss of Independent Mobility

Children's loss of independent mobility is linked with the changing constitution of our living environments. This is relevant across urban, suburban and rural contexts, and concerns issues of population density, access to space and the changing nature of human activity. This has given rise to concerns about children and risk, identified in relation to the prioritization of motorized traffic, concerns about unknown people and the potential for environments to be polluted in various ways (Moss, 2012, Thompson, 2011, Gill, 2021). However, there is a complex interplay between environmental qualities and human cultures, and it is asserted that the perception of risk to children has been disproportionately inflated by mass media coverage that compounds effects through a 'culture of fear' (Furedi, 2001, Moss, 2012, Thompson, 2011). Such a process has been described as

"a generalised insidious anxiety about safety that has found expression in fears for children even though they are statistically safer than at any point in human history".

(Gill, 2007, p.14).

This fear finds expression in an onus placed on adults to prevent adverse outcomes and has given rise to a changing culture in which children now do not stray far from home or go outdoors unaccompanied by adults (Gill, 2007, Thompson, 2011). The concern is for children's potential to cope with the risks present in their environments (Gill, 2006, Louv, 2005, Thompson, 2011, Moss, 2012), and this is supported by a culture of health and safety and blame and rights making "risk aversion a dominant social value" (NICE, 2009, p. 36). Constructed environments can be accompanied by a desire to protect economic investment in them, and has contributed to a growth in adult control, a shrinking in children's self-expression, and legislation that contributes to its continuation. (Speigal *et al.*, 2014). Fear also finds expression in authority attitudes which "often with the best of intentions, are eroding our children's freedom" (Moss, 2012, p. 16) and a "criminalisation of natural play" (Louv, 2005, p. 27) that can now frame children's exploratory behaviour as abnormal and delinquent. This not only significantly impinges on children's behaviours but also adults too, as it has created a culture in which adults are expected to control children's activity (Thompson, 2011). Activities enjoyed by previous generations

of children have come to be considered "troubling or dangerous" while adults who permit them are "branded as irresponsible" (Gill, 2007, p. 10).

2.3.1.6 Adults are Implicated Alongside Children

Just as children lose freedom to move about the environments in which they live, adults lose freedom from concern about it. Parental perceptions of risk have been described in terms of a culturally inflamed disproportionate level of anxiety with cumulative effect (see section 2.3.1.5). This has given rise to a scenario in which

"Strangers, dangers and risk-taking are portrayed as nebulous and irrational anxiety states that are contributing to another great fear, a fear that our children are getting fat".

(O'Connor & Brown, 2013, p. 157).

This complex interplay of pressures, responsibilities and restrictive conditions is not ideal for parenting, and it should be remembered that these conditions are not of parents' choosing. Environments speak a relational language that may be beyond cultural control of its effects, and just because this is not acknowledged does not mean that it should not be listened to. It has been demonstrated that environmental qualities are influential on inhabitant perceptions in urban contexts. A disordered or damaged environment can result in increased fear of crime and decreased satisfaction levels, while similarly, upkeep of a neighbourhood is associated with a perceived safety from crime, and consequent improved neighbourhood satisfaction (Hur & Nasar, 2014). The influence of such perceptions on parental decisions about children is also demonstrated, and parents in inner city environments have reported a greater anxiety about neighbourhood safety when compared with those in suburban areas (Weir *et al.*, 2017, Karsten, 2005). Such parent concerns do not occur in isolation and children themselves can report a wider range of safety concerns than parents, including worries about the potential for harm from strangers or traffic, bullying, or getting lost (Crawford *et al.*, 2017).

Measures to address such concerns are outlined in terms of environmental maintenance, encouraging pedestrianisation, greater community surveillance and the minimising of traffic (Hur & Nasar, 2014, Weir et al., 2006, Foster et al., 2015). An alternative route is also highlighted in placing an emphasis on behavioural change by "shifting the message toward the positive side of what is a highly contested decision-making space for parents" (Connor & Brown, 2013, p. 157), or for working on children's independent mobility as a "developmental process, requiring graduated steps and skill building" (Crawford et al., 2017, p. 131). It is acknowledged that this is a problem of some complexity, and that answers are qualitative and may work in tandem. However, what such studies clearly indicate is that it is not only children that are connected to their locality by virtue of their ability, but parents too through their connection to children. Current fears impacting on children's outdoor access have been described as "the result of a collective failure of nerve about children's need to learn for themselves how to cope with many types of risk" (Gill, 2012, p. 61). However, perhaps alongside this there can also be consideration of the significance of a felt-safety, and how this might reside in all qualities of humanenvironment relations. Parents and carers need to feel safe and connected to feel that their children will be safe too, and perhaps what present circumstances now offer is an opportunity to explore how to build this together. However, the present conditions of children's dependence on adults for access to outdoor play brings another issue into focus. This is in orientation-related factors identified as more impactful than opportunity on children's contact with nature (Soga et al., 2018, Passmore et al., 2020).

2.3.2 Orientation-Related Factors

Orientation can be considered as "the particular things that a person prefers, believes, thinks, or usually does" (Cambridge Dictionary, 2020), and this is highlighted as pertinent to human-environment relations. The 'orientation-related factors' currently identified as influential on a child and nature problem will be outlined and these will be highlighted as both shaped and understood according to adult perspectives. This will be followed by the suggestion that such conditions are offering scope for redirection through them, and that a child-led orientation could be influential within this. The opportunity and orientation-related factors influential on a child and nature problem are essentially interconnected, and this suggests a need for reconnection in and through our cultural responses.

2.3.2.1 Cultural Orientations Identified as Influential to a Child and Nature Problem

Children's opportunities for nature contact can be understood in terms of "a focus on space and time that allows children to explore nature" (Soga et al., 2018, p. 115), and the orientation-related factors influential to this as concerning how this space and time might be used instead. The organisation of contemporary family lives has been described as increasingly 'timetabled' by work, education and care (Karsten, 2015, Skar et al., 2016, Prince et al., 2013), and this can create an experience for children of 'islands' of home, care and school (Kernan, 2010, Prince et al., 2013). There is therefore an impact on nature contact through an "overscheduling of children's lives" (Skar et al., 2016) which implicates a loss of opportunity for free, open-ended outdoor exploration through orientation to adult organised activity (Skar & Krogh, 2009). A 'timetabled' life can involve an increased reliance on cars or transport (Karsten, 2005), decreased pedestrianisation and a reduction in social connection to the localities in which people live (Karsten, 2005, Skar & Krogh, 2009). Work pressures can be highly impactful and lead to a cultural devaluing of children's play and can be particularly relevant in pressured circumstances of extreme poverty (Santos, 2018, Karsten, 2005). As orientation-related factors are essentially considered in attentional terms, this is highlighting where our human exploratory impulses may be directed instead. This is identified in an increasing prevalence of electronic media and its draw on our time and attention (Clements, 2004; Pergams & Zaradic, 2006; Robison & Ridenour, 2012) in a cultural reorientation described as a "fundamental shift away from biophilia... to "videophilia."" (Soga et al., 2018, p. 119). These factors can be considered a cultural orientation influential on children's nature contact which shape family or carer lives and the opportunities for children within this. However, influence from adult-led culture might be considered as relevant not only to this problem, but perhaps also in evidence in the ways in which solutions have been conceived.

2.3.2.2 Family Orientations

Current concerns about children's contact with nature identify the significance of "family members' attitudes towards nature-based activities" (Soga *et al*, 2018, p. 119) and its impact on the developing child. In this way adult orientations are understood to influence the opportunities facilitated for children's nature contact. This has been explored through use of 'connectedness with nature' measures that consider the various qualities that can indicate this within individuals (Mayer & Frantz, 2004, Schultz, 2002, Richardson *et al.*,

2019). An exploration of children's nature-connectedness has demonstrated links between stronger measures of its' presence in children and a higher frequency of direct experiences with nature (Colléony *et al.*, 2017; Lin *et al.*, 2014, Soga *et al.*, 2018). Given children's increasing dependence on adults in accessing outdoor play, this highlights the significance of nature connectedness in the adults in children's lives. This is expressed in an observation that

"Children whose parents frequently take them to natural places for recreational purposes are more likely to interact with nature, simply because of their increased opportunities for nature experiences".

(Soga et al., 2018, p. 115).

Nature connecting opportunities in childhood are identified as a significant foundational layer for their subsequent orientation (Soga *et al.*, 2018, Ahmetoglu, 2017, Cheng-Hsuan & Monroe, 2012), and the ongoing, multi-dimensional impacts are described in the following way:

"If parents prevent or restrict their children from playing outside, children's opportunity and orientation are both likely to decrease (Hand et al.., 2018; Miles, 2008), which may in turn lead to an extinction of experience."

(Soga et al., 2018, p. 115).

Adult nature connectedness is now identified as not only influential on 'opportunities' for children's nature contact but also their 'orientation' to the natural world developed whilst there. It is asserted that an agenda to promote nature connectedness in children needs to consider not only contact with natural environments, but also types of experience enabled whilst there (Passmore *et al.*, 2020). The significance of this is identified in ongoing effects and highlights the ways in which a contemporary context is characterised by interconnection between adult and child. These circumstances are reflected in the Monitor of Engagement with a Natural Environment Report (MENE) (Defra, 2019) which reveals that 72% of the children's visits to natural environments were with adults from their own households whilst only 17% were with no adults at all. However, a reciprocal intergenerational effect was also demonstrated, and adults were found more likely to be frequent visitors to natural environments with children in their household. It is this

influential reciprocity that is in focus in this research and will be considered in terms of an opportunity through an adult-led culture for a child-led orientation to be heard. This focus will hold within it a question about a current understanding of 'nature' in the environment and promote consideration of historical understandings that understand this as equally expressive through us too.

2.3.2.3 A Child-Led Re-Orientation

Current cultural orientations are positioning adults as children's gatekeepers in accessing outdoor play. This is tying up adult and child time agendas but creating within this an opportunity for a child-led orientation. This is considered in this research in relation to the influence of young children who might be considered as the most developmentally opposed to adults. The significance of this will be explored in the following chapter on a holistic perspective, but here it will be highlighted in relation to the wider cultural context. It may be assumed that young children have traditionally always been more dependent on adults in accessing outdoor play. This may be true in some circumstances but not necessarily and may also be subject to the effects of a 'generational amnesia'. The outdoor play and nature access of babies and young children is currently not well represented in existing literature (Kemp & Josephidou, 2019) which suggests this may not have been considered a relationship of great significance or an issue of pressing concern. However, there are examples of historical photographic evidence of young children playing or moving independently in public spaces. This could be seen featured in The Play Well Exhibition (2020) which included film footage of very young children playing together on Tyneside streets in the 1980's. There are also some insights offered through research exploring impacts from Home Start interventions on city residents in the USA. This demonstrated very young children accessing outdoor play at home however taxing the socio-economic conditions if suitable yards were available (Marino et al., 2012, Tandon et al., 2017, Lovasi et al., 2011, Kimbro et al., 2011). Such research offers an indication of the ways young children's outdoor play needs can be relatively easily met within enabling circumstances. However, this also highlights the potential impacts of an ongoing urbanisation.

Young children play in smaller-scale ways and means that suitable space around the home can satisfy day-to-day outdoor play needs. However, an increasing density of people and activity can influence the potential for children to play outside near home even in these

'small-scale' ways. Priority given to motorised traffic and increasing concerns about risks and dangers mean that very young children's outdoor play can also become restricted to designated play places. Its potential significance for this research can be considered in relation to MENE Report findings (Defra, 2019) which indicate that adult-identified reasons for visiting natural environments with children differed with age. For the youngest age group this was described in terms of a desire to "let their children play and to spend time together with family" (Defra, 2019, p. 9), but as children get older, the reasons become more focused on identified learning or health goals. The potential implications of this will be given further consideration in the following chapter, however here it will be highlighted that it is current cultural 'orientations' that are creating opportunities for young children and carers to spend time in natural environments away from home. It is these circumstances that are supporting shared child and adult outdoor experiences and enabling the potential through them for an influence that might be considered reciprocal.

2.3.2.4 Current Conditions are Highlighting the Need for A Cultural Reorientation

The need to address a current child and nature problem is recognised as significant in establishing a sustainable future. This is through recognition of the influential relations between opportunities, the experiences these promote and ongoing orientations. The UK 'Green Future Policy' identifies a need to support "more people, from all backgrounds, to engage with and spend time in green and blue spaces" (Defra, 2018, p. 72) and that child should be encouraged to "be close to nature, in and out of school" (Defra, 2018, p. 1). Strategies to support this include the funding of nature-friendly school grounds along with the facilitation of trips to natural spaces, and this is accompanied by a need to improve green infrastructure in areas where it is of poor quality. This policy aligns with a research recommendation that education offers the most equitable means to support children's nature contact (Malone & Waites, 2016), however this does not seem to acknowledge a growing recognition of the interconnection between child and adult in their environmental relations. This is despite a stated need to take a "wider view of the barriers" to contemporary nature-contact (Defra, 2019, p. 12) and to give recognition to the needs and benefits to the family as a whole. This research is exploring a contemporary opportunity currently under-explored, and that is in the potential for a more socially and environmentally connective education. Current research into the child and nature problem and green future policy are highlighting the significance of interconnected relations, and this is pointing to the relevance of a holistic educational paradigm. This has been explored in this research through family-inclusion practices that celebrate the value of social and environmental connection within educational practices. The holistic educational philosophies that have inspired this offer a source of cultural reorientation, and this is in support of connective relations and the experiences these can promote (Froebel, 1887, Bruce, 2020). Deeper insight into the contribution of a holistic educational philosophy will follow, but first there will be an overview of the perspectival turns through which child and nature relations are currently understood. These too might be considered to point to the contemporary contribution of a holistic educational paradigm that can integrate these insights and work with their complexity.

2.4 Contemporary Contribution to Thought on the Child and Nature Problem

The child and nature relationship has been considered from different disciplinary perspectives contributing to an evolving understanding of these relations. These include evolutionary and eco psychological models, those informed by 'the embodied turn', and more recently post-human and new materialist perspectives. These offer complimentary bodies of literature creating a multi-dimensional picture of relations that "do not operate in isolation" but instead "interact with and are influenced by one another" (Ives et al., 2018, p. 1391). These therefore inform an understanding of complex opportunity and orientation related factors relevant to these conditions. However, it has also been suggested that ontological and epistemological differences can represent a challenge to enacting solutions. Guisti et al. (2018) have asserted that there can be a difficulty in determining the most "important criteria of child-nature-connectedness" (Guisti et al., 2018, p. 3) in designing infrastructure or activity to support a 'significant' nature experience. An impetus to act in addressing the child and nature problem is driven by an understanding of its links to planetary health. Rising concerns have led to the suggestion that "to meaningfully progress a "reconnection agenda", tangible actions must be directed towards specific changes, whether in health, education, or conservation" (Ives et al., 2018, p. 1395). This represents a significant recognition of our human responsibilities but might also retain a continuity with the prioritisation of human activity and its associated outcomes. Instead, there may be a new challenge emerging in the potential to acknowledge complex human-environment relations. This does not make tangible actions irrelevant but holds them in balance with the 'living development' of wider life. Identified

remedial responses are emerging through a broadening vision of child and environment relations, but a challenge within this lies in finding ways to meaningfully enact this. A continuing emphasis has remained on our capacity to conceptualise our problems, and this has given rise to adult-envisaged solutions (Rautio, 2013). However, there may be new opportunities emerging through acknowledging the 'voice' of child and environment which may support us all in becoming more relationally connected and embedded. An overview of perspectival turns will now be given in clarifying the relational dimensions being considered, and this will be followed by a question about an underpinning operational paradigm.

2.4.1 An Evolutionary Perspective

A biological view highlights that humanity has evolved beyond primary drivers and has given rise to a culturally driven imbalance in environmental relations. This is described according to the biophilia hypothesis which highlights a "fundamental, genetically based human need and propensity to affiliate with "life and lifelike processes" (Wilson, 1984, p. 1). This hypothesis rests on an evolutionary explanation expressed in the following terms:

"(a)Biophilia has been adaptive in our evolutionary history, (b) biophilia is still today woven into the architecture of the human mind, and (c) the human species cannot achieve its full measure of sensibility and meaning apart from the natural world".

(Kahn et al., 2009, p. 38)

The suggestion that humanity has lost sight of themselves as biological beings has been described according to the notions of the 'extinction of experience' (Pyle, 2003) and 'environmental generational amnesia' (Kahn *et al.*, 2002). It is asserted that a demonstration of this relationship can be discerned in the various benefits evidenced through human-nature contact, and this now provides the driving rationale for creating change (Kahn *et al.*, 2009). From this perspective, the route to improving human-nature relations lies primarily in facilitating direct contact with living systems, as the element lost within our evolving conditions (Kahn & Kellert, 2002). The concern within urbanisation has been in terms of the imbalances created through ongoing development, and a need determined for adequate human access to 'nature sites' within these

conditions. Given the complexity of demands and stakeholders one pathway of action is determined in discerning 'measures' within this balance. A key question has been identified in whether there is "a threshold level of urban intensity above which local children's experiences with biodiversity decrease rapidly, and if so, what that point is" (Soga *et al.*, 2018, p. 118). The promotion of children's nature contact from this perspective has therefore been identified primarily in opportunity-related factors as the most direct means of address, but with recognition of orientation-related factors as interwoven within these. Therefore, the need to design environments that offer opportunities for children's direct contact with living systems, and the facilitation of activity to promote their orientation towards this. Our insight into the significance of this activity, and motivation to support this is therefore significant, and this is where an ecopsychological perspective has made a contribution.

2.4.2 An Eco-Psychology Perspective

Ecopsychology offers a means for considering what a healthy human-nature connection might look like within the individual. This perspective has been defined according to the following terms:

1)the emerging synthesis of ecology and psychology. 2) the skilful application of ecological insights to the practice of psychotherapy. 3) the discovery of our emotional bond with the planet. 4) Defining "sanity" as if the whole world mattered.

(Roszak, 1994, p. 8).

From this perspective, an identified separation between humanity and environment is understood as a problem and this can be considered as evidenced in symptoms of ill-health in both. There is then an imperative to promote a healthy connection and this has given rise to a variety of tools designed to measure an individual's orientation to nature according to psychological traits. These traits can be understood as inclusive of the 'affective' domain...cognitive (knowledge and beliefs) and behavioural/psychomotor (actions and experiences) aspects" (Ernst & Theimer, 2011, p. 580). Tools have taken the form of questionnaires as means for measuring traits within the individual, and some have

been adapted for use with children (Cheng & Monroe, 2012, Ernst & Theimer, 2011). Although there are variations across scales, these pertain to three dimensions of an individual which include:

"a self-factor (an internalized identification with nature, reflecting feelings, and thoughts about one's connection to nature), a perspective factor (reflecting an external, nature-related worldview), and an experience factor (reflecting a physical connection to the natural world)".

(Ernst & Theimer, 2011, p. 580)

Although these dimensions can be individually defined, they essentially interrelate, and one influences the other. Achieving a connectedness with nature has been determined as "often realized through a process of receiving information, having an experience, being affected" (Zylstra et al., 2012, p. 124), and there has been a shift in research interest away from cognitive processes and towards the affective dimensions of connection with nature. It is asserted that this is "since it has been found that that "emotional connections are key predictors for environmental concern" (Zylstra et al., 2012, p. 124). The significance of these instruments has been highlighted in terms of the potential for "establishing current levels and thresholds of connection and evaluating efforts to improve connection" (Hughes et al., 2018, p. 11). Their use in activity to promote the child and nature relationship has oriented to evidencing the benefits of nature contact experiences, as well as seeking to determine the most effective means for attaining states of 'nature connection' (Richardson, 2021). Data can offer evidence to build adult insight into the significance of this agenda and support scope for adult action in support of these identified needs. Such measures align with an understanding that children have become disconnected with their natural environment, and therefore that it is imperative to reestablish this relationship. Such a perspective highlights the individual as site of change but seeks to effect wider cultural shift in enacting this. This work has seen the locus of activity with adults who hold a responsibility for creating the conditions and processes that can enable stronger nature connection in children (DEFRA, 2020).

2.4.3 The Embodied Perspective

Consideration of human-environment relations has also been influenced by an increasing focus on embodied experience. This has been strongly influenced by phenomenological perspective and its attention to the role of experience in knowing (Husserl, 1960, Heidegger, 1927). Phenomenology can be understood as "the study of human experience and of the ways things present themselves to us in and through such experience" (Sokolowski 2000, p. 2) and has been described according to the potential to go "back to the 'things themselves" (Husserl 2001, p. 168). Such considerations have engaged critically with a long-standing cultural influence from the concept of the Cartesian divide (Descartes, 1644), and a consideration of knowledge processes according to a mind/body split. Merleau-Ponty's philosophy has been highly influential to the 'embodied turn' through conception of the 'body subject' which can be understood as a consideration of "natural perception...with our whole body at once...which opens on a world of inter-acting senses" (Merleau-Ponty, 2002, p. 262). Perception is described within this as an "active interplay, or coupling, between the perceiving body and that which it perceives" (Abram, 1996, p. 57) and represents "the concerted activity of all the body's senses as they function and flourish together" (Abram, 2012, p. 59). The embodied perspective frames a reconsideration of the status of knowledge in the following way:

"Synaesthetic perception is the rule, and we are unaware of it only because scientific knowledge shifts the centre of gravity of experience, so that we have unlearned how to see, hear, and generally speaking, feel, in order to deduce, from our bodily organization and the world as the physicist conceives it, what we are to see, hear, and feel."

(Merleau-Ponty, 1962, p. 229)

In developing this line of thought, Merleau-Ponty moved towards a consideration of humanity and environment in collective terms and described this according to "the flesh of the world" (Merleau-Ponty, 1964). This gave expression to a sense of "the mysterious tissue or matrix that underlies and gives rise to both the perceiver and the perceived as interdependent aspects of its own spontaneous activity" (Abram, 1996, p. 66). Such a perspective has influenced an

"Increasing scholarly sensitivity and recognition for how we are always in our bodies, always everywhere embodied beings, acting and doing things in a material world. In that sense, all interaction is embodied, all actions are embodied, and all turns are embodied turns."

(Nevile, 2015, p. 141).

An embodied perspective runs through eco-psychology as evidenced in the concept of the econiche (Heft, 2013). This draws on a Darwinian perspective in considering "an organism in the context of the dynamic mutual relations of its econiche" (Heft, 2013, p. 162) as a set of necessarily reciprocal conditions in which "one set of features, among numerous possibilities...complements a species' way of living" (Heft, 2013, p. 163). This has been further developed in the concept of the 'embodied ecosystem' which attends to "a web of embodied relations that exist between humans and the environment". (Raymond *et al.*, 2017, p. 786) These include those between

"The individual mind (e.g., emotional reaction and cognitive perception of physical objects), body (e.g., bodily sensations and movement), culture (cultural values, imperatives, habits and rules) and environment (the physical environment which we dwell within)"

(Raymond et al., 2017, p. 793).

Within this consideration is given to the human capacity to function in symbolic terms and their contribution through this to an ongoing cultural life. This represents the conditions for evolution in conjunction with affordances, sits within an understanding of a system with an inherent propensity towards change, and suggests that individual actions "exist as a result of what these collective structures afford" (Heft, 2013, p. 165). This perspective has given rise to Affordance Theory which highlights human perception not only in terms of objects, shapes and spatial relations but also the action possibilities that these can afford (Gibson, 1979).

The 'embodied' nature of human experience is highlighted as particularly relevant to children's experiences in nature through recognition of their active and exploratory behaviours. Tools have been developed to support this including the 'Functional Taxonomy of Affordances' (Heft, 1988), which seeks to guide research into children's needs, and the means to better design environments to facilitate them. A more recent tool is also offered in The ACHUNAS Framework (Guisti *et al.*, 2018) as a guide for "the assessment of where people, and more importantly children, experience significant nature situations and establish nature routines" (Guisti *et al.*, 2018, p. 1). This tool is relevant to the contemporary greening of urban infrastructure and seeks to scaffold children's nature contact through insight into "qualities of significant nature situations" and the "abilities that constitute children's human nature contact" (Guisti *et al.*, 2018, p. 1). The potential for children to have voice within such processes therefore falls within adult-envisaged plans and is identified as a general trend despite isolated examples of child consultation. It has been asserted that

"The debate surrounding children's participation arguably remains focused on services that are designed 'for them' rather than 'with them'; such as new leisure, or educational facilities, whilst there has been comparatively little attention to children's roles in shaping a wider regeneration agenda".

(Day et al., 2011, p. 3).

Such tools therefore acknowledge children's voice and seek to integrate this with adult perspectives. However, these are still mediated by an adult agenda, rather than allowing the potential for a more radical suggestion to emerge from child and environment. This therefore retains a continuity with valuing rational abstraction, and through this, can preserve relations with wider life on humancentric terms. There may be scope for children's voice to work through this, but their perspectives may not be fully heard if the relational qualities though which they are expressed are not given equal status.

2.4.4 Post-Human and New Materialist Perspectives

Affordance theory has been critiqued from a posthuman perspective through identification that although the significance of the physical environment is recognised this is cast in a passive role (Änggård, 2016). Instead, the posthuman perspective seeks to depart from an "anthropocentric view of humans as the only agents in the world" (Änggård, 2016, p. 78), and broaden recognition of agency to "nonhumans such as animals, environments, things and other materials" (Änggård, 2016, p. 78). This concept has been described according to a 'distributed agency' (Barad, 2003, 2007) which facilitates the posthuman aim to unsettle established concepts and boundaries. Through this there is the suggested potential to shift attention to "phenomena, rather than independent objects...(as)... the crucial and constitutive entities in which reality is configured" (Änggård, 2016, p. 78). The post-human perspective is broad, and inspiration has been drawn from Nietzsche, Spinoza, and Deleuze (Braidotti, 2006). This perspectival turn has shaped the conceiving of matter, not as inert substance requiring a "soul" or "mind" to vitalise it, but as holding its own agentic life force (Carranza, 2018). Such an understanding is demonstrated in Braidotti's reconnection with the Aristotelian notion of 'zoe' in contemplating "the dynamic, self-organizing structure of life itself" (Braidotti, 2013, p. 60).

From a post-human perspective, human-environment relations shift from 'inter-actions' to 'intra-actions', and this promotes consideration that "the ability to act emerges from within the relationship" (Barad, 2003, p. 827). As such, relations are not so clearly delineated, and instead represent the "mutual constitution of entangled agencies" (Änggård, 2016, p. 87), and hold the qualities of being essentially "diverse and ever proliferating" and "non-linear and 'messy" (Rautio, 2013, p. 395). The focus should instead be directed toward

A unit of analysis which is not about objects/things/matter or people/meanings but the heterogeneous assemblage comprising both, the 'dance of human and nonhuman agency',

(Rautio, 2017, p. 1381)

Essentially this perspective raises questions about human perception, suggesting that "knowing exceeds individual human beings: it is much more than a human issue" (Pyyry, 2017, p. 1398). Through this humanity is repositioned from "a curious world-molding subject" to one situated by a world that "poses questions to us as we go with it" (Pyyry, 2017, p. 1398). It is the agentic role of the physical world that is being recognised and gives rise to recognition that there is something that runs through this, that seemingly unites it all. It is suggested that "assemblages are alive. They have a life of their own that is more than the sum of their parts. They follow life" (Pacini-Ketchabaw, Kind & Kocher, 2016, p. 53). Concerns about the child and nature relationship are reframed according to the terms in which this problem is cast. It has been asserted that there should be a

"Focus on how childhood/nature/urban as concepts need to be transformed, so to afford a better set of grounds for engagement with the changing conditions our species – as one among many – is facing?"

(Duhn et al., 2017, p. 1359)

Therefore, a posthuman response to a contemporary concern about the child's potential for connection with nature would identify this as positioned within a broader question about "the diversity of ways in which we are nature already" (Rautio, 2013, p. 394). It is about a rethinking the constitution of this problem, and whether reconnection can be to a recognition of ourselves as part of the world, and therefore human-built environments as a constituent part of this. A new understanding of 'the body' (Deleuze, 1988) has become operational within the posthuman project and this seeks to depart from a "human/nonhuman definitional pairing, which still has human at its core" (Harker, 2005, p. 57). Instead, 'a body' can be constituted by any matter, all of which holds equal status and can be considered purely by the defining properties of "relations of motion and rest, and...by its capacity for affecting and being affected". (Harker, 2005, p. 57). Within this shifted understanding, the child and nature question can become more open-ended, unbounded by concepts of bodies, boundaries between them or the potential for separation. Instead, children's play activities can come to be viewed as "phenomena in which children, matter, discourses and other agents intra-act". (Änggård, 2016, p. 79). It is suggested that such a framing can illuminate the agentic forces at play that reside within materials and a child's responses to them. It is proposed that observation of young children in relation to these can illuminate an agency within their "aesthetic-affective openness" (Rautio, 2013, p. 400) that is almost "irrational and mostly unreflected" (Rautio, 2013, p. 402). This view marks a departure from the onus resting on adults to promote children's 'nature contact' through the design of environments or promotion of activity within it. Instead, it is determined that there is an "arguably unmeasurable" value in children's ways of being that "could be thought of as intrinsic and grounding" (Rautio, 2013, p. 400). This might hold the potential to influence adults who have so far felt an onus on them to provide "equipment and allocate special spaces and time for participation" (Rautio, 2013, p. 396). Instead, what might be more important for children is for "an adult to take seriously the things and actions with which they encounter their worlds anyway" (Rautio, 2013, p. 396). Through this perspectival turn there is a highlighting of multiple agencies and their expression, but also a seeming continuous emphasis place on abstract concepts and linear forms of expression. The suggestion of this thesis is that there are cultural tools to support a wider integration of 'voices' and these are buried within the evolution of our ideas but can be recovered and revived.

2.5 Perspectival Limitations

The perspectival pathway mapped out here might be considered as demonstrating a process of conceptual reconnection, between individualised human experience and terms through which to encompass the whole context. This 'wholeness' may be understood as the environment, the planet, 'nature' or sense of a 'life force' depending on the perspective. The terms offered by each perspective can be considered in terms of the layers of relations from which this context is formed. This perspectival path has initiated with an identified need for physical contact between humanity and their wider living systems. Considerations have then moved to the qualities of inner human experience involved in this process of connection. Attention to embodiment has addressed an established cultural differentiation between mind, body, and environment, and this has been accompanied by the potential for these qualities to be shared. Just as humanity can be experienced as sentient, there then arises implications for surrounding life, and a sense of continuity between them expressed in terms such as the 'flesh of the world' (Merleau-Ponty, 1968). This gives rise to a consideration of the agentic nature of 'more-than-

human' life and a displacement of the assumed authority of human experience that has been at the core.

An inherent limitation arising from such perspectives resides in an assumption that solutions rest primarily with human action. This is framed by a linear consideration of time and the human lifespan in these terms, and therefore the potential impact that resides in human-environment relations. An understanding of children's contact with nature as the foundations for healthy environmental relations, can therefore position adults as responsible for the future through their investment in the life of the child. In present conditions of disjuncture this places an onus on adults to facilitate children's access to significant experiences. Conceptions of distributed agency have offered an expanded understanding of the influential relations in this context, that are inclusive of the agentic nature of surroundings as well as the child's activity (Rautio, 2013, Latour, 2005, Barad, 2007). This is a whole context that is being considered in increasingly fluid, dynamic and open ways, and is moving towards its consideration in essentially whole terms. However, there is still the potential for an even more radical departure through attention to an underlying and perhaps unacknowledged paradigm or meta-narrative. This involves engaging with a pivotal question about how far human life should be considered as individualised, or whether this experience can be understood as equally expressive of the whole. As a view this is not new but represents a realm of cultural activity that has been silenced through cultural domination and de-valuation (Zylstra et al., 2014, Gottlieb, 2012, Simard, 2021). However, its presence has been enduring and has been practiced in peripheral cultural spaces (Mahmoudi et al., 2012, The Steiner Fellowship, 2021). These dominated perspectives can be considered as holistic and can be understood and experienced in holistic terms. This includes the potential for 'knowing' holistically through all domains of human experience, and that this can offer the means for connection with a whole context that has a 'voice' as valid as any of its parts. A very different framing of potential solutions is then offered, and these can lie both within and beyond the limits of our currently recognised and valued human capacities. This pivots on a human potential to surrender some of its hold on individualism, in order to seek a balance with a listening to the whole. It is this perspective that will now be outlined in the next chapter, although with an enduring consideration of the human freedom and responsibility to act at its centre. This is a perspective that may be challenging to some current Western cultures, but this is exactly where its significance might lie.

2.6 Summary

This chapter has defined the relational terms under consideration in this research and demonstrated the impacts of social and cultural change on their consideration over time. These definitions can be understood as constituent parts of the context framing a current child and nature relationship problem. An overview of current literature demonstrates the identification of barriers and illuminates a complex ongoing interplay of social and environmental relations. There have been evolving perspectival turns contributing to the address of this issue by building insight into the nature of relations at play. These have shaped the suggested means for addressing this problem, however, there has been the preservation of some ongoing agentic issues within this. This can be considered in terms of preserving a faith in our capacity for conceptualising our problem as a basis for determining solutions. This overview of literature will now be followed by considering the potential for a paradigm shift, and this involves lifting considerations away from the page and being equally led by child and environment.

3 The Holistic Paradigm

3.1 Introduction

This chapter looks at the role of a paradigm, and the implications of its fundamental shift. It explores what is offered by a holistic paradigm, how this can be supported through holistic education, and what this can contribute within contemporary problematic conditions. The child and nature problem can be considered as arising through a current dominant paradigm underpinning both a state of global disease and local dis-connective conditions (Zylstra et al., 2014). This paradigm can be understood as having influenced the environments we live in, our lifestyles within them and is continuing to impact on our qualities of experience. These environments and their effects have been the product of adult design and understood in terms of impacts on children's independent mobility and their potential for experience in the localities in which they live (Gill, 2021, Pyle, 2002). This process has now created conditions in which children and adults share more outdoor experiences together, but through this the potential for insight into such losses being shared by us all. There is contemporary recognition of the child as 'indicator species' for future healthy urban development (Peñalosa, in Gill et al., 2020), and this is now highlighting a need for greater balance in our daily relations. A holistic perspective can offer a new paradigm for considering possibilities, and this is through placing the whole context at the centre, highlighting connective relations and drawing attention back to the significance of our own holistic capacities within this.

3.2 The Impacts of the Dominant Paradigm on The Child, Adult and Environment Relationship

There is a contemporary identified need to reframe thinking about human-environment relations, due to consequences arising from some of the historically dominant world views (Zylstra *et al.*, 2009). This includes impacts identified on and through children's loss of contact and connection with the natural world. The naming of the Anthropocene has been highlighted as serving an important function as an "unsettling ontology that disrupts a persistent 'humanist paradigm" (Malone, 2018, p. 4). It instead calls for "radically reimagining what it means to be human, revisiting the crucial question of

agency, and risking finding new ways of relating to the world" (Taylor & Pacini-Ketchabaw, 2015, p. 510). This change can be seen reflected in the perspectival turns outlined in the previous chapter, and a growing reflexivity about the role played by human ideation. It has been suggested that just as the

"eighteenth-century Enlightenment created the conditions for our world, we need a twenty-first-century Renaissance of wisdom, founded on the belief that our role as human beings is to restore, steward, and celebrate the Earth's unique and immanent nature".

(Sanderson, Walston & Robinson, 2018, p. 424).

It is this quality of 'wisdom' that will now be considered as this marks the grounds upon which a paradigm shift might turn, as it places an emphasis on values and the crucial role that these play in mediating human activity.

3.3 The Potential Role of Wisdom

Interest is growing in the social role fulfilled by 'wisdom', and this demonstrates interest in human capacities not only for knowledge and understanding, but for making choices based on these. Wisdom has been characterised according to its provision of sources of positive ethical values, their potential for influence on judgements and characterised by "perspective-taking, self-distancing, and cognitive integration" (Li *et al.*, 2020, p. 256). The contemporary context is one characterised by an increasing global focus, and this is evidenced in the emergent concept of 'polyculturalism'. This concept describes human cultures as essentially interrelated and mutually influential (Kelley, 1999, Prashad, 2001), and one element of culture identified as worthy of contemporary attention is recognised in its wisdoms. A context of polyculturalism therefore gives rise to the potential for a fusion of wisdoms, and this aspiration is described according to a sense of 'high modernity'. This perspective works with the value of equanimity in the co-ordination of different world views so that the "rules of one world cannot replace rules of another world, and one kind of reason cannot suppress another kind of reason" (Li *et al.*, 2020, p. 259). It is discerned that:

"In this era of globalization, different cultural wisdoms have their own characteristics, and have certain advantages when faced with the problems of human survival."

(Li et al., 2020, p. 260)

The potential is identified to "integrate various cultural resources in a more complex and flexible way to construct a polycultural wisdom theory. "(Li *et al.*, 2020, p. 261), and that such an approach might hold the potential to foster a solution to our modern crisis. The theory works through the values of equanimity in seeking to find commonalities, but perhaps also to determine a strength through this in our human capabilities. As an aspiration this highlights a growing consciousness about the role played by values in human culture, but it is also important to be aware of the ways in which this is done. There is the potential to maintain a relationship to ideas as "matter" that can be "utilized" (Li *et al.*, 2020), and it should be remembered that it is equally important that we learn how to live our wisdoms too. This is a process that rests upon our capacity to be reflexive as summarised in an identification that "The study of wisdom emphasizes the search for the continued optimization and the further cultural evolution of the human condition" (Staudinger & Glück, 2011, p. 215).

However, this thesis engages with the potential to shift beyond a humancentric paradigm, what this might offer and how it might occur. This is considered in relation to a holistic perspective and its critical treatment of human individuation. Instead of a positioning of the self at the 'centre' of the world, it instead frames human experience as an expression of the world through the self. This is not a new idea and has continued to exist in peripheral cultural sites, but has been obscured through cultural domination (Gottlieb, 2012, Simard, 2021). It is an idea that represents a radical departure from contemporary individuation and is therefore a challenge to current perspectives that frame thinking and engagement in these terms. The two holistic perspectives explored in this research are Gebser's theory of the evolution of human consciousness (1949) and this will form the foundations for an historical contextualisation of Froebel's holistic philosophy (1837). These holistic theories will frame human experience within an essentially 'big picture' perspective that pertains to existence. Gebser's theory not only offers a means to consider our current perspectives as the product of historical processes, but also to see a potential

shift beyond this through the enveloping of all experiences within an integrative path. A conscious effort to integrate world views can be considered as indicative of such a path, but one on which there is continuing scope for a more fundamental shift. A contemporary aspiration for a 'higher modernity' raises consciousness of the values promoted by a world view, and therefore highlights a responsibility in our choice-making on this basis. The choices associated with a 'big picture' perspective are fitting in scale and dimension to our contemporary planetary-scale problems, and force reflection upon the very 'nature' of our very humanity within this. Questions that arise in association with such reflexivity include whether it is ever possible to solve our problems with the same thinking through which they occurred? Also, whether it is most important to try to 'understand' what wisdom represents, or if it is more important that we work out how to live it? These are questions that a holistic perspective seeks to fulfil, through an orientation towards a vision of the whole and determining the means for human connection within this. The relevance of this to current child, adult and natural environment relations will be explored first in connection with Gebser's theory as a holistic vocabulary by which to consider our human development. This will then frame the potential to reconsider adult and child relations in mutually influential terms and will be used in this research to explore what Froebel's holistic pedagogy can offer in supporting this.

3.4 The Holistic Paradigm

3.4.1 Holism

A definition of holism is given as when

"Parts of a whole are in intimate interconnection, such that they cannot exist independently of the whole, or cannot be understood without reference to the whole, which is thus regarded as greater than the sum of its parts".

(Oxford Dictionaries, 2020)

Ultimately, the 'whole' might be understood as all life and therefore as the universe or the earth, and this has roots in the Greek word hólos meaning entire or whole. All that exists within this is understood according to interconnection so that any change or event affects everything else, and there is an overall relational pattern to the whole that imbues all within it with meaning. The holistic perspective can be understood to hold respect for the "spontaneous, creative life force or energy which manifests the ultimate unity of the universe" (Miller, 2000, p. 388). Acknowledgement of the whole therefore brings to consciousness the state of existence, and this can be considered as a spiritual world view (Miller, 2000). The language used to describe this can vary from religious conceptions such as God, spirit or divine to modern psychological terms such as higher self or self-actualisation. Such a view does not demand the necessity of a 'faith' but can invite engagement in its perspective and potential impacts from this on earthly relations. This does however ultimately offer a challenge to some historically dominant Western cultures and a framing of the potential for human experience through these (Zylstra *et al.*, 2014, Gottlieb, 2013, McCarraher, 2019).

3.4.2 Humanity as Part of the Whole

A holistic world view therefore offers the vision of a new form of subjectivity, and its potential to guide or restrict beliefs, choices, and actions. The holistic perspectives considered in this research engage with a vision of an "ultimate source of human unfolding which transcends biological and cultural influences" (Miller, 2000, p. 388). This vision can be considered according to the term 'ultimacy', as it implies that there is a state of being that an individual can aspire to in union or as a 'cosmic harmony' (Forbes, 2003). This view has been described as a radically non-reductionist view (Miller, 2000), as it is fundamentally opposed to a culture attuned to phenomenon in biological or cultural terms. Within such terms, humanity is understood as an individual in separation to surroundings and shapes a conceiving of their life according to a state of individuation. A spiritual perspective however can represent a fundamental challenge to this vision and is suggested to offer a profound message to a human recipient that "you are not who you think you are, and you do not have to think the way you think you do" (Gottlieb, 2013, p. 9). The potential offered is that of a transformation of human experience, but that it is "so intense that it may feel like a sacrifice of your very identity, a kind of death. Which, in some sense, it is" (Gottlieb, 2013, p. 9). It represents a death to the defined limits of the individual and a surrender to the whole, and it is this process that offers growth not only for the human being but for the life of which they are part. This understanding can be readily dismissed by culturally dominant perspectives that perceive human life as the limits of possible agency, however what this can offer is an opportunity to 'radically reimagine' what it means to be human in the world (Taylor & Pacini-Ketchabaw, 2015). Such a perspective is described as "not fatalism, passivity, or an impossible mysticism, but a hard-nosed, ultrarealistic assessment of life's most basic truth" (Gottlieb, 2013, p. 19). That is the suggestion that humanity does not possess the level of control over life conditions that their abilities have led them to believe, and it is this perception that sits at the source of many of their problems.

This world view has found expression within various forms of nature spiritualty in which the very materials and experiences of the world can be considered to offer an experience of the spiritual. This potential has been described in terms of the 'everyday spiritual' and can offer a "sense that our connection to it is truer than our social identity, ego-bound desires, and conventional priorities" (Gottlieb, 2013, p. 147). This perspective sits in opposition to a reductive contemporary culture and the human individualism that this supports and re-introduces perhaps a 'Renaissance of wisdom' that conveys a message that "life is not a product of humanity's knowledge or conscious choice" (Gottlieb, 2013, p. 151). Through orienting to interconnection there is then the potential to shift focus onto life itself, and for this to become the "basis for our kinship, we can recognize and celebrate our shared aliveness" (Gottlieb, 2013, p. 151). Paying attention to the very fact of being here and sharing a life represents a wonder in and of itself, and this can only truly be appreciated through embodied experience. There is a potential that resides in paying attention to being here, and through this

"We remember we are beings that breathe and eat; sense the sun, feel the wind and rain, and experience love, fear and pleasure".

(Gottlieb, 2013, p. 160).

Such experiences offer the potential to distract us from the more humancentric cultural activity of "our politics and our theology, our social status and the list of books we have written" and instead refocuses on the human potential to "directly engage with the natural Other" (Gottlieb, 2013, p. 160). Such a perspective offers an orientation to the whole identified as needed within contemporary conditions and determines the means for achieving this within our fullest human capacities. This represents a radical shift and is therefore challenging for this reason. However, it is this that is identified as called for by

the consequences of our current world view, and problems arising from a human-centric perspective (Sanderson *et al.*, 2018, Taylor & Pacini-Ketchabaw, 2015). This is a possibility envisaged according to the theory of the evolution of human consciousness (Gebser, 1949) which offers a vision of our whole human potential and lens through which to consider radical change. This offers a holistic theory through which to consider all cultural forms including currently dominant paradigms, and the potential for alternatives that have been culturally marginalized. An overview of Gebser's theory will follow and will frame a consideration of Froebel's holistic philosophy which has been historically side-lined but may now offer a source for a 'renaissance of wisdom'.

3.5 A Vocabulary for Holistic Relations

3.5.1 The Theory of the Evolution of Consciousness

The theory of The Evolution of Human Consciousness (Gebser, 1949) is drawn upon in this research as a vocabulary for holistic relations. The work of Jean Gebser is hard to categorise, but Mahood (1996) suggests that he can best be considered as a 'cultural philosopher'. Gebser's work finds a place within the academic world, operates according to its terms but not solely and seeks to provide a commentary on its identified limitations. The evolution of consciousness offers a theoretical perspective, but through this seeks to transcend the "black-or-white categories of the rational orientation to life" as the language through which it is expressed (Jean Gebser Society, 2020). Reason is not rejected, but "its inflation into the sole arbiter of our lives" is, and it is highlighted that a "reasonable" person may be inclined to reject the very essence of Gebser's theory and its celebration of the values of magic, myth, religion, feeling, empathy, and ego-transcendence (Jean Gebser Society, 2020). Gebser's work occupies the role of the paradox as engagement with it involves dealing with "a non-traditional approach to a broader than usual subject that has been forced into a well-known and familiar medium: the book" (Mahood, 1996). However, it is this that offers the interest of a new perspective, and one that aligns with the focus of this research. This is on relations between children, adults and a natural environment, how their influence on each other might be equally valued and what this might offer in supporting healthy relations in the world.

An overview of this theory will be outlined here, and further detail will be supplied in subsequent chapters as it is applied through the research. This is to avoid repetition, and to demonstrate the potential empirical relevance of this perspective. The Theory of The Evolution of Human Consciousness (Gebser, 1949) describes a spiritual source of all life defined as 'Origin' which is to be understood as an "atemporal, immaterial source" (Yiangou, 2017, p. 431). Human life forms part of its expression as a being with consciousness, and experiences this from within its fabric as "the internal subjective dimension of the cosmos" (Yiangou, 2017, p. 430). This human experiential process can evolve in parallel with physical forms and can serve as "a testimony to the ever less latent and ever more transparent spirituality that is inherent in all that is" (Mahood, 1996). Human consciousness can be considered as "neither knowledge nor conscience but must be understood for the time being in the broadest sense as wakeful presence." (Gebser, 1949, p. 42). Its evolution is described according to a series of 'structures' that shape a capacity for human experience. These consciousness structures are expressed through whole cultures and individual lives, both of which hold a capacity to evolve. There is thereby a parallel between the life of the individual and the life of the whole, and the potential to discern the same processes occurring in both. The evolutionary process is described according to five broad but distinct phases that are named as archaic, magic, mythic, mental and integral consciousness. These structures offer "significant generalizations that help us to orient our understanding of the human experience" (Yiangou, 2017, p. 432) and a means for considering a potential for our human experience to evolve. This is through a process of "transcending and including the degree before it" and through this "becoming increasingly expansive and capable of comprehending a wider and deeper perspective" (Yiangou, 2017, p. 432). The theory disrupts a linear understanding of human development through the generational shift of individual lives over time and reorients to a spherical vision of individual life within an ongoing whole. Such a reorientation dispels a hierarchical valuing of the development in our human abilities in which some are superseded and left behind. It instead understands each way of being as the significant expression of a continuously evolving whole that is learning about itself and becoming more conscious.

On a very general level each structure can be considered to shape a deepening experience of an individuated self from which to form a relationship with the whole. Through this there is scope for experiencing a relationality in which there is the potential to gain insight into the value in a state of wholeness. This process initiates with archaic consciousness which can be understood as a state of pure presence, in which there is little awareness of any separation between self and surroundings. This is primarily a state of immersion in experience and attends to embodiment and emplacement. This is followed by magic consciousness in which a sense of self starts to emerge, and through this a developing sense of 'other' and one's own agency in forming relations. Mythic consciousness is where language and symbol systems start to be used in the form of story, song and rhyme, and this can shape 'polar positional' relations between self and surroundings characterised by affective capacities. The present-day mental consciousness is associated with an "unambiguous "I" that is doing the thinking" (Yiangou, 2017, p. 431), and this is described as a position that steps out of "the circle of congruity" with the world and becomes "world-centric, where identity is with humanity at large" (Yiangou, 2017, p. 431). Through this we gain our fullest experience of human individuation, and from this can then consciously choose to reconnect with a state of wholeness or 'Origin'. The ultimate stage of development is integral consciousness which retains a continuity with each consciousness structure and its values and is suggested to be currently emergent. Through this humanity reinhabits a sense of wholeness that is informed by awareness of our fullest creative potential. Progress through the consciousness structures is described as a process of evolving into each new possibility but with the potential to tip into its pathological expression, and this functions to affect a transition from one stage of consciousness into the next (Johnson, 2019). Central to the holistic perspective however is an understanding that no stage of consciousness is superior to any other: progress is directional, integrative and revolves around the logic of unity. This position is inherently compassionate about human failings that form part of Origin's expression and represents a process of coming into consciousness as the "internal subjective dimension of the cosmos" (Yiangou, 2017, p. 430). The following model offers an illustration to support engagement with these terms and reflects the sense that I have gained through use of them in this research. This is of relational layers that form a rich, thick continuous interconnection between individual and surrounding life. This is a consideration of human experience that appears to chime with the potential for research to engage with 'thick description' (Geertz, 1973).

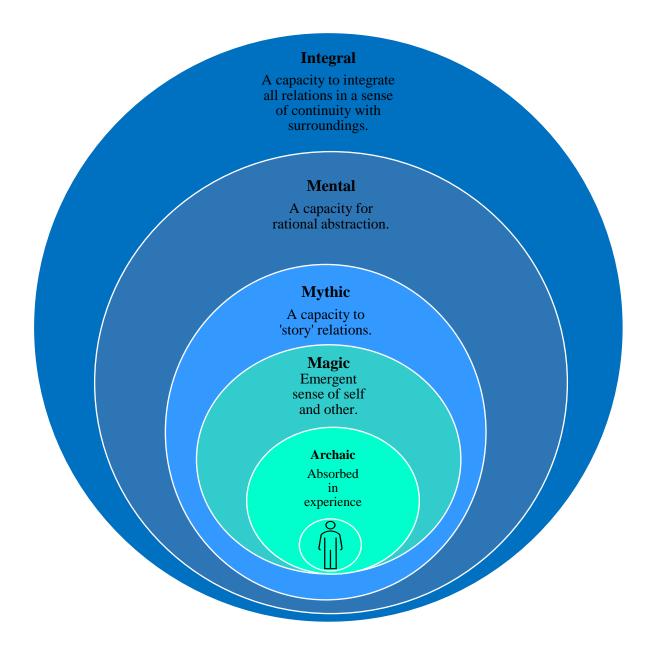


Figure 1: A Vocabulary of Holistic Relations (Drawn from The Theory of the Evolution of Consciousness, Gebser, 1949)

This diagram highlights dominant qualities associated with each consciousness structure shaping human relations with the life of which they are part.

3.5.2 A Vocabulary with Empirical Relevance to Children

The theory of the evolution of human consciousness has been identified as holding an empirical relevance, and this is through research into children's experiences in nature and adult memories of this. Such findings have been described as giving rise to "special quandaries" through demonstration of "realms of experience that the dominant practice of science considers inadmissible on its own terms" (Chawla, 2002, loc. 2604). Rather than dismissing such findings, Chawla (2002) sought a system of thought that could 'contain' them, and this was found in Gebser's theory. This has been suggested to offer a 'vocabulary' for otherwise "difficult-to-acknowledge aspects of children's experience of the natural world" (Chawla, 2002, loc. 2604). Essentially, this is through its dismissal of the valuing of logic over 'primitive' or prelogical thought. In this way, childhood ways of being can be valued as equally significant as adults' and can through this bring into focus "dimensions of experience that have received limited research attention" (Chawla, 2002, loc. 2527). Chawla (2002) draws upon the example of archaic consciousness which offers a means to recognise the value in non-verbal interactions that might be considered "elemental in an immediate physical sense" (Chawla, 2002, loc. 2635). Its empirical relevance is described in terms of a sense of young children's play as being

"Baptized in the world by immersion...close to the ground and up against the full sensory qualities of things...that adult height and habits will later remove them from".

(Chawla, 2002, loc. 2635)

This can be considered alongside magic consciousness which offers a means to acknowledge the significance of a young child's sensory orientation to surroundings demonstrated in their playful absorption in making and remaking while "immersed in earth, water and growing things" (Chawla, 2002, loc. 2715). Such ways of being represent young children's everyday explorations which may seem inconsequential and in-themoment "sweet nothings" (Chawla, 2002, loc. 2715). However, Gebser's holistic theory suggests that it is the integration of these capacities that can enable our 'being' and 'becoming' with the world, and it is this that frames them as valuable and worthy of attention.

This theory offers a perspective that can frame consideration of our global history, current cultural context and future potential and hold this together with our experiences in any moment. It offers a holistic conception of life that can frame an understanding of current conditions shaping a child and nature problem, but also a means by which to reconceive it. This is through revaluing children's ways of being as equally significant to adults, and present conditions as offering an opportunity to 'live with children' that is significant in holistic terms. This theory of the evolution of consciousness will now frame consideration of cultural shifts that have side-lined Froebel's educational message over time but may now be providing conditions in which its contribution can be recognised. This vision of the potential for a paradigm shift will now be outlined in relation to a generalised description of holistic education and followed by an overview of Froebel's holistic philosophy and educational principles as an example of this.

3.6 The Holistic Educational Paradigm

Holistic education is rooted in a vision of the whole that frames individual experience according to this significance. Education in these terms can be understood according to the growth, renewal and development of the individual in relation to the whole and can frame human experience as a spiritual being in search of meaning within this. Such a framework positions learning according to the

"Discovery of true human nature...which goes beyond the psychic apparatus of thoughts and emotion. It is learning to belong to the whole. It is the discovery of our universal dimension, where genuine human values, not individual human values, reside".

(Mahmoudi et al., 2012, p. 182)

Such education has been described in terms of "learning to be human" (Mahmoudi *et al.*, p. 182) and offers a radical alternative to prevailing social and cultural norms. There are a range of philosophical orientations and pedagogical practices that align with this paradigm and orient to basic assumptions and principles but applied in diverse ways (Miller, 1992). Education seeking to support heathy growth and development according to this vision strives for the balanced development of, and relationship between

"Different aspects of the individual (intellectual, physical, spiritual, emotional, social and Aesthetic), as well as the relationships between the individual and other people, the individual and natural environment, the inner-self of students and external world"

(Mahmoudi et al., 2012, p. 178)

This is education that is essentially concerned with life experience and seeks to "focus on the interconnectedness of experience and reality" (Mahmoudi *et al.*, 2012, p 178). This sits in opposition to educational practices oriented to narrowly defined skills, which have been identified as fragmented knowledge that promotes an alienation between an individual and surrounding life (Neves, 2009).

This research has sought to explore the contemporary contribution of this perspective, through reconnecting current early years educational practice with its historical roots in Froebelian holistic pedagogy (Brehony, 2009, Prochner, 2017). This process might be considered a holistic endeavour in and of itself, through the integration of cultural influences in seeking to address current imbalances in our whole relations. These historical cultural processes can be understood as influential on individual experience, and this holds relevance to the contemporary conditions surrounding child, adult and natural environment relations. Froebel's philosophy and pedagogy can offer commentary with direct relevance to current conditions situating child and adult in sharing outdoor experiences together. This is through highlighting a holistic value in their influential relations as outlined in the suggestion that

"Play truly recognised and rightly fostered, unites the germinating life of the child attentively with the ripe life of experiences of the adult and thus fosters the one through the other".

(Froebel, cited by Liebschner, 1992, p. 24).

An outline will be given of Froebel's philosophy and educational principles as demonstration of a holistic educational paradigm. As a holistic vision, these orient to interconnected principles that encompass the whole context and each holds relevance to this research to a greater or lesser extent.

3.7 Froebelian Education

3.7.1 The kindergarten: A Garden for Children

Friedrich Froebel established the first early year's educational setting outside the home in rural Germany in 1837. This was named a 'kindergarten' as an analogous description of a 'garden' to support children's growth in harmony with the natural world. It is reported that Froebel wished for the child to be viewed as a 'bud on the great tree of life', and the task of education as cultivating the potential to fulfil the calling of 'Nature herself' (Ebers, 1893). Froebel's educational ideas are associated with the Romantic movement, the ideas of Pestalozzi and influence from German Idealist philosophers Fichte, Schelling, Hegel and Krause (Brehony, 2013, Roseman, 1969, Provenzo, 2009, Reese, 2001). It is also suggested however that his ideas were biographically as well as culturally influenced and emerged along a pathway between living 'in and with nature' and a desire for the comprehension of "the laws which govern the wonders he observed" (Liebschner, 1992, p. 33). Froebel's mother died when he was nine months old, and his strict Lutheran Pastor father had little time available for his large family. Froebel's childhood was described as lonely and troubled, and that he spent long periods of time alone in the gardens around his home. It is suggested that "bereft of love", Froebel instead formed trusted friendships with "the flowers and weeds, the beetles and ants beneath him and the sun and the rain, the birds and the fleeting clouds above him" (Liebschner, 1992, p. 2). Froebel himself asserted that his mother's death "decided more or less the external circumstances of my whole life" (Froebel 2005, 8, cited in Best, 2016, p. 274), and is a view supported by contemporary theories of emotional attachment (Bowlby, 1969) and containment (Winnicott, 1960). Froebel's philosophy has been described as "highly abstract, metaphysical, deeply religious, and spiritual" (Provenzo, 2009, p. 87), however his kindergarten practices have been historically influential on the global development of early years education (Brehony, 2013, Prochner, 2017, May 2017). This philosophy can be understood as having shaped some very familiar early years educational practices that have demonstrated an enduring appeal to children across place and time.

3.7.2 The Philosophy of Unity and Opposites

Froebel's underpinning holistic philosophy is expressed according to two central principles: The Law of Unity, and the Law of Opposites. The Law of Unity is described as "an all-pervading, energetic, living, self-conscious and... eternal Unity" (Froebel, 1887, p. 1), and the Law of Opposites as the means for human understanding within this gained through a 'connection of contrasts'. This law describes a learning process in which "everything and every being...comes to be known only as it is connected with the opposite of its kind", and that it is through a process of "discovery of the connecting thought or link" that "its unity, its agreement with its opposite, its equation with reference to this is discovered" (Froebel, 1887, p. 42). Froebel described the human experience according to a process "by which that unity may be grasped and realised in the life of the individual" (Best, 2016, p. 280). This is to be achieved through human self-action which can be considered in relation to life's 'unfoldment', and further insight into this concept will be outlined in relation to play as human activity (see section 3.7.3.2). For Froebel, early education offered a means for a conscious protection of the child who can be considered "a struggling expression of an inner divine law" (Harris, 1887, p. 7). According to Froebel's vision of humanity, education can offer a means for the protection of this "natural root...until it burgeons into self-controlling growth" (Roseman, 1965, p. 332), and represents a view of human life not only as the potential of the individual, but the human individual as holding the potential of the whole. Froebel's life's works have been described as a mission "through education to promote the realisation of the inner unity of the person, and his realisation of the unity between the inner and the outer aspects of his existence" (Best, 2016, p. 277). This aligns with the holistic educational paradigm which identifies its purpose within the growth, renewal and discovery of the individual in relation to the whole.

This is an understanding of childhood in line with influence from German idealist philosophy, in which the 'life spirit' in the child is identified as needing to be preserved and protected. Hegel described this according to a 'world-spirit' (Geist), Herder a 'creative life-force' (Kraft), and Froebel, a Christian belief in the "spirit (soul) that constitutes the vitalising force animating development" (Hardcastle, 2011, p. 2). It is this

philosophy that underpins the inception of 'child-centred' learning but is a concept that has undergone a change in interpretation in line with a wider cultural paradigm. This shift can be considered from 'child at the centre of their world' with development according to its divine laws, to the "progressive notion that the children should direct their activities" in line with a biological conception of life of which the individualised child is at the centre (Chung & Walsh, 2000, p. 229). This aligns with a cultural shift from rational to empirical knowledge, in which the values given to concepts of continuum and whole retreat from consideration in favour of the observable part. It is identified that

"Froebel introduced the concept of continuity to the discourse of development. Childhood was not mere preparation for adulthood but a continuous stage in the whole of development in which every stage was significant."

(Chung & Walsh, 2000, p. 218)

This represents an understanding of human life as an 'unfoldment' in which each stage of being represents the grounds out of which appropriate development in the next can occur. An expression of this is demonstrated in the assertion that "the child, the boy, man, indeed, should know no other endeavour but to be at every stage of development wholly what this stage calls for" (Froebel, 1887, p. 30). However, within a paradigm of human individuation, the significance of childhood becomes increasingly weighted with an individual's futurity, and this is in opposition to a holistic perspective in which an individual's self-action is an expression of a wider unfolding life. This sense of human development is described in the following terms:

"The purpose of education is to encourage and guide man as a conscious, thinking and perceiving being in such a way that he becomes a pure and perfect representation of that divine inner law through his own personal choice; education must show him the ways and meanings of attaining that goal."

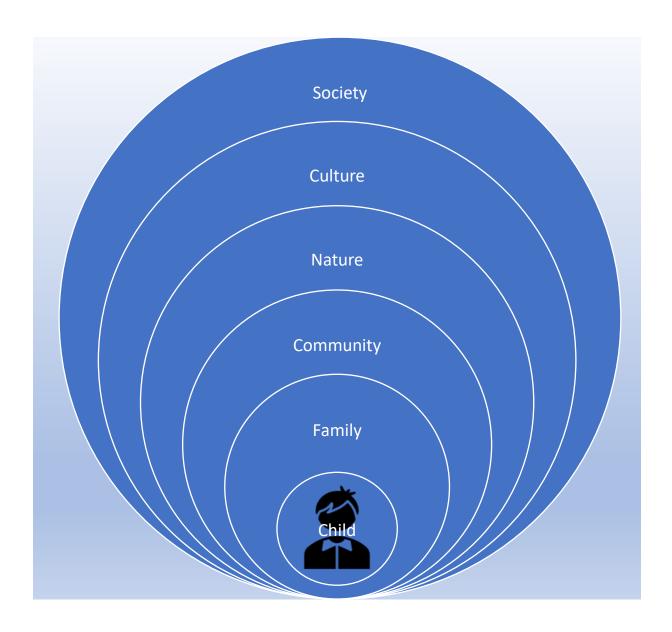
(Froebel, 1887, p. 2)

Froebel's pedagogy orients to a holistic intentional benefit for children, adults and the expression of life through them. This is essentially relational, oriented to connectivity,

and seeks to imbue the part with an understanding of the whole. The child as focus of educational activity represents a site of unity between self and external world, but this is essentially situated within their family, community, nature, culture and society. The significance of this is preserved as a Froebelian educational principle and frames consideration of the context in this research. The following model offers a visual prompt to aid thinking in these terms.

Figure 2: A Froebelian Conception of the Whole Research Context

Drawn from the Froebelian educational principle which promotes consideration of every child in relation to family, community and to nature, culture and society (The Froebel Trust, 2020). The ordering of these layers can raise questions but illustrate an expression of 'Unity' though humanity, environment and their ongoing influential relations.



3.7.3 Froebelian Pedagogy

3.7.3.1 Connection through Human Community

For Froebel, the kindergarten created the means for harmony between the home, school and community in the child's life, and provided a practical measure in assisting families in the education of young children in preparation for schooling (Brehony, 2013). At this stage, the young child and family are themselves described "as a unit" (Froebel, 1887), due to the nature of a child's development and their dependence on adult support. Froebel discerned that one could not separate a child's earliest activity from their play, or play from their learning, and has been identified as the first great proponent of play within the educational process (Brehony, 2017). Froebel emphasised the experiential nature of children's learning and development in harmony with their environment, and created a pedagogy intended to support "the growth of knowledge from inside rather than from outside the child, which involves the unfolding of principles rather than merely learning rules by heart" (Hargreaves et al., 2014, p. 309). For Froebel, 'Life Unity' implicated all actions, decisions and cognitions as significant within educational practice, and so included every play activity, moral action or new knowledge experienced by the child. Connection between home, school and community therefore promoted a context of social continuity for the child, built recognition for the child's play as learning, and promoted the role of adult according to a call to "Come, let us live with our children" (Froebel, 1987, p. 89).

3.7.3.2 Play and Human Creativity

Froebel's own experiences informed his belief that "learning succeeds best when undertaken by a searching and self-active mind" (Liebschner 1992, p. 16), involves sensory engagement with the world of nature, and underpins his recognition of the importance of play as learning. Froebel has been "widely heralded as the apostle of play in education" (Brehony, 2017, p. 16), and was the first to make play itself a pedagogical feature. For Froebel, play is humanity's first productive and creative activity, which can be translated into work in adulthood, and is to be understood in relation to "a God who works creatively and productively" (Best, 2016, p. 18). Here Brehony (2016) draws a

direct link between Froebel's viewpoint and Romantic Idealist philosophers, who saw human activity as the means for self-constitution. For Froebel this meant that

"We become truly godlike...we represent the inner in the outer; that we give body to spirit, and form to thought; that we render visible the invisible".

(Frobel, 2001, p. 31 cited by Brehony, 2016, p. 38).

Froebel's conception of play is formulated within an envisioned continuum of human productivity, that needs to be allied with the divinity that constitutes life (Brehony, 2017, Best, 2016, Provenzo, 2009). Froebel identifies humanity's challenge as one of balance: religion without work becoming "idle fancies" and work without religion "degrades man into a beast of burden" (Froebel, 2001, p. 31, cited by Brehony, 2016, p. 18). Froebel saw in play an expression of the potential of the "inner, hidden, natural life" in humanity and their surroundings, and "holds the sources of all that is good" (Froebel, 1887, p. 55). Froebel was the first to identify within play and childhood, a significance for later life understood in line with the German idealist notion of unfoldment (Brehony, 2017). Fichte, Schelling and Hegel developed philosophies that centred around conceptions of an 'Absolute', according to which life unfolded, and within which there was a significance for human self-realization. Fichte determined the human spirit as the means for the realisation of an ideal world, with a human responsibility to strive towards this freedom through their activity, with the natural world a tool to achieve this. Both Liebschner (1992) and Roseman (1965) identify a link between Fichte and the emphasis on self-activity in Froebel's philosophy, which has been described as a 'Fichtean sense of duty' (Roseman, 1965, p. 31). Froebel's description of the potential for play to provide "joy, freedom, contentment, inner and outer rest, peace with the world" reveals his understanding of this as an expression of life's source, and that this can form "the germinal leaves of later life" (Froebel, 1887, p. 55). However, like all aspects of life understood according to the Law of Opposites, this requires balance, synthesis and "somewhere a connection" (Froebel, 1887, p. 43). This can be considered in relation to the pedagogical relations between adult and child.

3.7.3.3 The Adult Role

Froebel's Law of Unity is described in relation to a 'spherical law' (Liebschner, 1992), which takes 'the self' as its starting point, and action emanates from its centre "just like the heavenly bodies in the cosmos" (Liebschner, 1992, p. 8). Froebel stated that it is "the destiny and life-work of all things to unfold their essence" and that the human path towards this is one of "self-determination and freedom" (Froebel, 1887, p. 2). In line with this, educational interactions between child and adults should be understood as bi-directional. Childhood represents a state of being more connected with its source as evidenced in a curiosity to "know the inner nature of the thing" (Froebel, 1885, p. 73). However, that adult perception can give rise to a loss of insight into the intention behind this behaviour as described in the following:

"We call it childish because we do not understand it, because we have not eyed to see, nor ears to hear, and, still less, feeling to feel with the child; we are dull, therefore the child's life seems dull to us".

(Froebel, 1885, p. 73).

Adult perception can lead to a greater valuing of its own qualities as described in the potential through which "our conceit induces us to lose sight of this natural and divine starting-point of all human development" (Froebel, 1887, p. 68). However, that this does not lead to greater clarity or authority, and "we stand perplexed, having lost beginning and end, and therefore the right direction" (Froebel, 1887, p. 68). Froebel's guidance for the adult educational role therefore aligned with an understanding of 'child at the centre of their world' and advocated a responsive sensitivity to child-led activity. This is in order not only to be led in educational activity by a child's unique needs, but equally for the adult to gain insight from the expression of their unique nature in relation to the world. It is this potential for an adult to gain insight from childish perception that is lost through a current cultural paradigm. Within this, that which is past remains there, but in orienting to the whole there is ongoing potential for integration. This can offer a source of renewal and vitality to the whole and this is through the ongoing processes within a collective development.

Play can offer an example to the witnessing adult of the human being in a state of unity (Best, 2016), but like all of life's expression requires effort to retain balance. This balance is described in terms of the potential for play to become aimless which adults can support through "rational conscious guidance" and re-orientate this through a broader adult perspective towards "those tasks of life for which it is destined" (Brehony, 2017, p. 20). Froebel identified three different types of play in 'The Education of Man': symbolic play, as representations of ordinary life, creative play "where the material used is the only limiting factor" and imitative play, through which the child can "freely recreate" what has been learned in school" (Liebschner, 1992, p. 53). These conceptions are identified as Froebel's first expression of a play theory, necessary for adults to understand if they were to engage with this for educational purpose (Liebschner, 1992). Froebel suggested that we should "learn from our children" and their play, and that

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"What we no longer possess – the all-quickening, creative power of child-life – let it again be translated from their life to ours".

(Froebel, 1887, p. 89)
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Froebel suggested that children offer an opportunity to revisit a quality of being that adults lose, and that this is of value. Froebel's compulsion to "live with our children" (Froebel, 1887, p. 89) is described as needing to be translated according to a sense of "devotion to, absorption in, harmony with, the life of our children" (Hailmann, 1887, p. 89). It is further suggested that it "means entering fully into their simple ways of seeing and saying, of feeling and thinking, of willing and doing" (Hailmann, 1887, p. 89) and that it implies "seeing we with the eyes of a child, hearing ourselves with the ears of a child, judging ourselves with the keen intuition of a child" (Hailmann, 1887, p. 90). Froebel's description of education as a process of making "the outer inner – and the inner, outer" (Froebel, 1826, p. 32), may highlight for adults the benefit in a 're-experiencing' of ourselves in the world, and moments of connection between ourselves and our social and environmental surroundings. Within a holistic context, it might also be understood that it is not only significant for adults to reconnect with the value of childhood, but also for children to benefit from a continuity with the "children's and childhood's individual and collective past" (Hanson, 2017, p. 284) in accompanying adults.

3.7.3.4 Connection with Life in Nature

To promote the principle of harmony, Froebel looked to the natural world as means for a "removal of obstacles to growth and the elimination of force in pedagogy" (Roseman, 1965, p. 331). Froebel drew attention to human understandings of the natural forces within the plant world, "which we grant space and time to...because we know that, in accordance with the laws that live in them, they will develop properly and grow well" (Froebel, 1887, p. 8). Through this Froebel aimed to demonstrate a view of humanity and the natural world in a state of continuity. Thereby, human instincts and impulses are viewed as indicative of a life-source as expressed through "man's positive tendency" (Roseman, 1965, p. 331), which if followed can aid humanity to "move forward toward its end" (Roseman, 1965, p. 331). In kindergarten practice, this belief was embodied in the garden as both a central motif, and a practical resource. The garden provided the means for children to observe life in the natural world and nurture the growth of plants and experience this continuity of life as they were themselves growing and being nurtured by teachers and families. This notion finds expression within this pedagogical depiction of caretaking:

"This nurturing of flora and fauna simulated the nurturing they themselves received from their teachers and was reiterated in the way they were encouraged to serve each other and their community: not just making their playroom clean but pouring water for the next child when they took turns to wash after dinner".

(Darling, 2017, p.368)

A garden can provide an early year setting with the potential for drawing on the forms and processes of the natural world, which can both support and structure adult activity, and colour and shape children's experiences. Roseman (1965) locates the pedagogical value of this experience in "the opportunity for insight it affords in the child's mind as it moves amongst the objects that populate its world and intuits the connectedness of self and object" (Roseman, 1965, p. 331).

3.7.3.5 Pedagogical Resources to Support Connection

Froebel's pedagogical approach involved the development of tools to enhance practice in the form of the Gifts and Occupations, movement games and Mother Songs. The gifts and occupations embodied Froebel's understanding of children's developmental needs and were "systematically 'built in' to the sets of progressively more complex learning experiences" (Best, 2016, p. 278). Their carefully considered forms of material, size, shape and combination of objects embodied the intention to orient children's thoughts and imaginations to their physical world, and through activity "represent the holistic relationships which exist between all facets of our experience" (Best, 2016, p. 279). Polito describes these resources as the means "to awaken and stimulate in the child a renewed desire for observation and expression of nature" (Polito, 1996, p. 163). As such these represented a supportive rather than directive experience, and Froebel described children's play as having the potential to hold holistic, experiential qualities defined as the 'Forms of Knowledge, Life and Beauty' (Liebschner, 1992, p. 80). The form of knowledge represented learning through processes of construction, the form of life through the potential for representing shape, substance and forms encountered in daily life, and the form of beauty as an engagement with aesthetic quality (Tovey, 2018). In line with Froebel's second underpinning principle of the Law of Opposites, the child was viewed as having the capacity to make connections between contrasts necessary for understanding. This learning was determined as best achieved through an "individual's own experience of the world, and by self-analysis, reflection and the contemplation of sensory experience" (Froebel 2005, 11, cited in Best, 2016, p. 277). Froebel regarded the child as having an "innate inclination to seek the truth and knows what it is that it needs in order for its potential to unfold" (Best, 2016, p. 280). Ebers (1893) reported from his own experiences at Froebel's Keilhau School that "the child should be led to feel, work and act by its own experiences" and that education must claim "the whole man, his inner as well as his outer existence" (Ebers, 1893, p. 101). These Froebelian principles interconnect and support relations within a continuum, and it is this approach that aids a consideration of shared child and adult outdoor experiences in mutually beneficial terms.

3.8 Summary

This chapter has engaged with the potential for a radical paradigm shift in an experience of the whole through the self. The significance of this is highlighted in connection with wisdom-based values in support of this, and a current interest in marking a cultural transition away from the assumed authority of our human rational capacities. Gebser's theory offers an overview of a potential transition through our human capacities and their relational impacts. This theory frames a consideration of Froebel's educational model, and the potential for humanity to re-engage with its value now. This potential for shift can be considered as prompted by a web of ongoing human-environment relations in which we are being increasingly compelled to act in order to effect change.

4 Methodology

4.1 Introduction

This chapter will begin by outlining my positionality as researcher and how this has framed my ontological and epistemological decisions. This will be followed by a description of my methodological approach in 'doing sensory ethnography' (Pink, 2009) which aims to explore the potential offered by digital media for exploring new routes to 'knowledge'. Sensory ethnography has offered a means for engaging with holistic experience, exploring what this might be constituted by and what this can tell us. In this research, this has framed use of child-worn Go-ProsTM as a research tool during family trips to natural environments. The footage has formed the basis for adult engagement with children's perspectives and an exploration of what is illuminated through sensory elicitation interviews on this basis. This process has offered a contemporary means for attending to Froebel's call to 'live with our children' and to consider what this might tell us in current conditions. Details are provided on the research context and participants, and how these reflect issues highlighted in current literature concerning child and nature relations. The role of Froebelian pedagogy is outlined in relation to the early years practice explored in this research, and its potential relevance to this research context. The decision-making that occurred across the whole research engagement is outlined, from pilot study to completion of fieldwork and subsequent data analysis. Sensory ethnography is outlined as a highly reflexive engagement with knowledge-making, and it makes explicit that this activity continues within the ongoing research dissemination.

4.2 My Positionality as Researcher

Ontology can be understood as "the nature of our beliefs about reality" (Richards, 2003, p. 33), and frames a research perspective on what can exist and what can be known about it. This positioning guides the researcher to epistemological assumptions that are concerned with "the nature of knowledge and the process by which knowledge is acquired and validated" (Gall *et al.*, 2003, p. 13). The central focus of this research is a holistic perspective, which frames a consideration of human experience as an expression of the whole though the self. The experience leading me to this involved an observation of

young children's influence on adult activity in a natural environment. I subsequently found this to align with a Froebelian perspective and this has provided a connection between theory and empirical evidence. My biographical path to this point has been constituted by strong inner motivations and their relations to surrounding choices and chances. An experiential path has emerged that speaks convincingly to me of the potential for life to not be as it is presently shaped by social and environmental conditions, and although I speak subjectively, there is the potential for this to be archetypally human. My choice to engage in Steiner education was based on an instinctive response to its soft, sensory approach in relation to children. It was this experience that then shaped my subsequent professional practice, the potential for research observations and my current position. I cannot state with any certainty my beliefs about the nature of reality, and I do not hold a faith-based world view that guides my thinking about this. However, I can be led by my experiences, and these have held an air of truth that I have been able to marry sources of ideation.

A scientific view can offer an account of these experiences, but I am not convinced that this needs to be where consideration ends. For me, a potential for a deeper significance does not need to be dismissed and is worthy of consideration in relation to meaning, choices and values. Experience has told me that living in wild desolate terrains in the West of Ireland can be stressfully isolating, but simultaneously calming to one's physical state. That young children truly love and express sadness in missing the opportunity to run freely outdoors and are not afraid to express this in statements that can touch an adult heart in a memorable way. That raising young child can be isolating, and that social and environmentally supportive relations are equally important and can aid one's experiences in this demanding task. The fact that any of this can be culturally devalued or dismissed as 'romanticism' seems to me immaterial: I have experienced it, and it is this that has driven and sustained my biography in forming a path to this research now. Best (2016) suggests that Froebel seemed to feel a sense of 'pre-destiny' about his life which reflected a view that there are eternal laws at the heart of all that exists: a sense of life that is essentially an "eternally creating All-Life" (Froebel, 1887, p. 13). This is a vision in which there is also an understanding that it is "the destiny and life-work of all things to unfold their essence" and that within this there is a human path of "self-determination and freedom" (Froebel, 1887, p. 2). A drive to redress an imbalance in relationality has been a strong personal motivation, and I find this reiterated in Froebel's assertion that his

mother's death "decided more or less the external circumstances of my whole life" (Froebel 2005, 8, cited in Best, 2016, p. 274). If an individual's relational needs are not provided for this can drive exploration within wider contexts. Although this is accounted for in theories such as containment (Winnicott, 1960) and attachment (Bowlby, 1969), this does not preclude these also being the expression of a holistic state that I find congruent with my experience. This biography now frames my research focus, and the approach that I have taken in its exploration. I do not know that holism is 'reality', but I am curious, and I see it as a world view with merit to support its value.

4.3 An Interpretivist Paradigm

This research works within an interpretivist paradigm as this enables consideration of a holistic perspective, in which individual experience can be considered expressive of the whole life of which it is part. An interpretivist paradigm can be understood as a "response to the over-dominance of positivism" (Grix, 2004, p. 82) and the assumption that it is possible to discern through an objectivity "standards by which truth can be universally known" (Guba & Lincoln, 2005, p. 204). Instead, the interpretivist paradigm assumes that it is only ever possible to work with socially constructed multiple realities. This embeds the process of knowing within human experience and suggests that "It is not possible to know reality as it is because it is always mediated by our senses" (Rehman & Alharthi, 2016, p. 55). This view can align with a holistic perspective which positions human experience as an integral part of the whole and necessitates that it is only ever possible to know about existence as a part of this. Such an understanding might be considered as expressed within this holistic account of human experience in which

"Every external object comes to man with the invitation to determine its nature and relationships. For this he has his senses, the organs that enable him to meet that invitation".

(Froebel, 1887, p. 40)

An interpretive paradigm can be associated with an epistemology identified as subjective, and an understanding that observations are filtered through past experiences, concepts and worldviews. In line with this, it is asserted that "Perception is seen not as a passive-receptive process of representation but as an active constructive process of production"

(Flick, 2004, p.89). This too aligns with a holistic world view in which a human pathway is understood as one of "self-determination and freedom" (Froebel, 1887, p. 2). Such a view might also be considered as expressed in a potential for whole relations or an "integral" human consciousness, constituted by layers of human experience of which language and rational capacities form only one dimension (Gebser, 1949). The interpretive paradigm has been criticised as being too "soft" and lacking in objectivity, but such a criticism is not congruent with a consideration of life in holistic terms. In fact, the qualitative approach associated with an interpretive paradigm can still call upon the need for research activity to have "precision, systematicity, and careful attention to detail" (Richards, 2003, p. 6). However, incorporated within this is a reflexivity about the role of the researcher, couched within an understanding of this role as a "co-constructor of knowledge, of understanding and interpretation of the meaning of lived experiences" (Guba and Lincoln, 2005, p. 196). This framework supports engagement with human 'lived experience', and this may or may not be considered as an expression of the whole.

4.4 The Research Method

4.4.1 Choosing a Research Method

The choice of research method involved an exploration of research tools and the subsequent discoveries this led me to. This section will therefore give an overview of this decision-making process and outline the research method this led me to adopt. I had originally planned to use an observational method for recording interactions between child, adult and natural environment. My concern had been to ensure that these attended to enough detail to reflect holistic experience. I created observation frameworks based on recent insights into children's nature connection processes and planned to trial these in the pilot study (Rolfe and Emmett, 2010). However, alongside this, I was also curious to explore the potential offered by a Go-ProTM video camera, and whether this could offer child-centric technology through a capacity to move with children and record their experience. I therefore trialled both tools in the pilot study, and it was the success of the Go-ProTM that led me to discover the research method described as 'doing sensory ethnography'. Further details on the pilot study process will follow, but first I will outline sensory ethnography as an approach that is well aligned to the focus of this research. This

interplay between tools and research process is reflected in the description 'doing sensory ethnography', which is outlined as an emergent method, being informed by practice and highly reflexive about its intersection with the life it explores.

4.4.2 Doing Sensory Ethnography

'Doing sensory ethnography' is described as an engagement with the possibilities afforded to the senses in ethnographic research (Pink, 2009). This method can align with an interpretivist research paradigm through its attention to processes involved in subjective knowledge. As an emergent method this is contextualised by a wider shift in attention towards embodied experience described as a 'sensorial turn' (Howes, 2003). The framing of ethnography with a concern for the 'sensory' is suggested to give rise to a "reflexive and experiential process through which academic and applied understanding, knowing and knowledge are produced" (Pink, 2015, p. 4). As an approach this consciously situates the ethnographic practice within the research context, includes the researchers experience as it intersects with these encountered and does not aim to produce an objective claim on 'reality'. This framework can then accommodate influence from my own biography but hold this together with the research context being explored. The approach is thus differentiated from auto-ethnography as I do not draw purely on personal experience as self-narrative (Reed-Danahay, 2006). Instead, the aim of sensory ethnography lies in offering an account that is

"As loyal as possible to the context, the embodied, sensory and affective experiences, and the negotiations and intersubjectivities through which the knowledge was produced".

(Pink, 2015, p. 5)

This description negates the potential for a superior knowledge form based purely on rational abstraction and situates knowledge-production within human experience contextualised by wider relations. It is determined that investigating sensory perception involves use of methods that can grasp "the most profound type of knowledge which is not spoken of at all" (Bloch, 1998, p. 46). This method could support the aim in this research to explore holistic relations, what these might be constituted by and how these

might be experienced. A holistic perspective is concerned with the potential for multidimensional relations to be expressed equally through individuals or whole cultures. Doing sensory ethnography explores the potential offered by new digital media for examining our knowledge-making processes. This intention aligns with an interest in holistic experience, the potential for questions about our ways of knowing, and the status that we attach to arising knowledge. From a holistic perspective, this might be considered as the means being offered through our given conditions for a growing consciousness about our place within them.

4.4.3 Questions of Ontological and Epistemological Relations

Ethnographic research methods have evolved in seeking access to contexts inaccessible to observation and have expanded ideas about validity through enabling insight into other people's worlds. Sensory ethnography represents an extension of this through engaging with new tools and approaches that can shape its practice as it develops. This might suggest that it is through this shift in attention to the means and ways of knowing, that ideas about what can be known change too. In this way, questions of ontology and epistemology can be considered as co-constituting, and that each can support expansion of the other. This dual focus is expressed in the descriptor 'doing sensory ethnography', which represents both conceptual and practical steps in re-thinking research techniques according to "sensory perception, categories, meanings and values, ways of knowing and practices" (Pink, 2015, p. 7). The central focus in sensory ethnography is attention to human perception, which questions its relations to wider culture, and calls on a level of reflexivity that seeks to go beyond "how a culture is written, to examine sites of embodied knowing" (Pink, 2015, p. 13). Influence is attributed to Merleau-Ponty's phenomenological philosophy (1962) and Gibson's ecological psychology (2000) both of which emphasise human perception as multisensorial and environmentally situated. Merleau-Ponty placed sensations at the centre of human perception and identified these as emergent through encounters with 'sense-data'. However, that to be realised sensations need to be 'overlaid by a body of knowledge' which exists within the human body as a "synergic system, all of the functions of which are exercised and linked together in the general action of being in the world" (Merleau-Ponty, 1962, p. 234). Gibson's (2000) eco-psychological approach identifies human perception through interrelated senses

integrating bodily and mental processes in relation to "structuring optical (auditory, tactile etc...) stimulation" (Gibson, 1994, p. 20). An emphasis on embodiment is also stressed from a post-human perspective in which human perception is described as "not the achievement of a mind in a body, but of the organism as whole in its environment" (Ingold, 2000, p. 30), as a view also congruent with neurobiological findings (Pink, 2009). It is these shifts in contemporary attention that can support engagement with a holistic perspective, and exploration of the value in considering whole individuals in whole relations with a whole context.

4.4.4 The Rationale for the Use of this Methodology for this Research

Attention has turned to qualities of environmental experience and its loss or 'extinction' in our daily lives (Pyle, 1978), and sensory ethnography has emerged to offer a critical lens through which to explore these conditions. A loss of experience is highlighted as a concern in relation to children and their loss of 'direct contact' with the living systems of our world (Kellert & Kahn, 2002). This is a concern that has come to light through contrasts in adult memories of past childhoods that seemingly illuminates the enduring significance that such experiences can hold (Chawla, 2015, Wells & Lekies, 2005). The nature of its significance might be considered to rest upon the embodied and emplaced nature of human life, and the ways in which this can be characteristically expressed by children in active, exploratory and playful behaviours. These ways of 'being' children are expressed in day to day lives and can thereby present adults with a visual barometer of local environmental conditions and its impacts. Children's loss of independent mobility is highlighting the changing nature of the localities in which we live, and potentially a lack of human fit. However, the identification of children's capacity to draw attention to our environmental relations is not new and this is evidenced in a description of their compulsion to "know the inner nature of the thing" (Froebel, 1887, p. 73). Froebel too highlighted children and their ways of 'being' in relation with surroundings as a focus for broader human change. This is expressed in an identification of the "creative power of child-life" that can be "translated from their life to ours" (Froebel, 1887, p. 89). A significance is thereby highlighted in adult attention to children's ways of being in relation to surroundings. The potential for 'doing sensory ethnography' may be offering a bridge that can traverse our contemporary concerns and those highlighted in Froebelian philosophy, with a tool to pay attention to the key relations identified within them. Doing

sensory ethnography engages with the current ubiquity of digital media, and the capacity this offers to focus attention on embodied and emplaced relations through sensory experience. Its use in research with young children is growing (Ronning, 2020, Hackett *et al.*, 2015), but its potential to be explored in connection with a holistic perspective is new. It is this that gives rise to a reflexivity about children's influence on adults and the potential to consider its benefit. This focus on sensory knowing and routes to sensory knowledge has framed an exploration of what a holistic perspective can contribute to our understanding of the influential relations between young children, adults and a natural environment.

4.4.5 The Conceptual Framework of Sensory Ethnography

Sensory ethnography has developed through a focus on the aesthetic-sensual (Gardner, 2012) and the multisensory-experiential (Pink, 2009). The former is focused on the capacity of film to convey emotional states through "aesthetic-sensual immersion" (Nakamura, 2013, p. 133) and the latter in "gaining knowledge through embodied practice and closer attention to all of the human senses" (Nakamura, 2013, p. 134). Both are relevant to the practice of doing sensory ethnography, but it is development of the potential for sensory knowing that holds greatest relevance in this research. Sensory ethnography has been developed by Pink (2009) and underpinned by a 'conceptual framework' oriented to perception, place, knowing, memory and imagination (Pink, 2009). Inspiration is drawn from Casey's (1996) theory of place in conceiving the research context as an 'ethnographic place' in which "animate and inanimate entities...experiences and histories, even languages and thoughts" (Casey, 1996, p. 24) form a 'gathering process' (Casey, 1996). Human perception forms one part of this context, and sensory ethnography pays attention to the ways this occurs through sensorial processes that contribute to knowing, memory and imagination.

4.4.5.1 Perception and Place

This conceptual framework enables engagement with the whole research context as described in Froebelian terms according to child, family, community, nature, culture and society. Perception is understood in terms of interrelated sensory experiences of emplaced

individuals, and place as an 'event' within an inherently fluid context of spatial-temporal qualities. The notion of 'enmeshment' (Ingold, 2000) has been drawn upon in conceiving of 'place' as something that can 'occur' along the life paths of beings in movement that meet and form a 'meshwork' of paths. Notions of place are formed in relation to a parallel notion of space, and this helps to illuminate the ways in which the 'local' is integrally interwoven with the 'global' (Massey, 2005). Pink (2015) draws on Casey (1996) to describe the ways in which the individual can experience this through perception as a sensory engagement with material, social and power-imbued environments. This perspective can be considered in connection with Gebser's (1949) theory of an evolution of human consciousness which describes our human capacity to shape the cultural contexts in which we live. The individual is operational within this and contributes to continuous processes of making and remaking through the multidimensional interactions of consciousness structures. This can be served by the reflexivity of sensory ethnography, which acknowledges that its own activity is also situated and emplaced within these conditions.

4.4.5.2 Knowing, Memory and Imagination

These are concepts of place defined according to 'lived' processes, and through this highlight a need to account for human perception to understand them. Attention to senses can offer a route into the significance of human place-making practices, and these are considered in terms of processes of knowing, memory and imagination. Consideration of 'sensory knowledge' raises questions about how this is transmitted between people and across generations as social, participatory and embodied processes and has been considered in terms of 'knowing in practice' (Wenger, 1998). This conception of knowing is contingent on connectedness both historically and with others and occurs through sensorial and material engagements with the environment. Knowing is related to the concept of knowledge, and Wenger (1998) has identified that this is both situated in a particular place and moment but simultaneously attached to broader discourses. This concept offers the means for identifying connections between people, places and space, and the ways in which global discourses and power relations can be entangled and expressed through 'local' places. Such processes apply equally to research participants and ethnographer in seeking 'to know as others do', and frames ethnography as calling upon "the ability to negotiate new meanings" (Wenger, 1998, p. 226) in processes that are "fundamentally experiential and fundamentally social" (Wenger, 1998, p. 227). However, Pink draws on the notion of 'skill' (Ingold, 2000) to suggest that it is possible through a reflexivity in such processes to create a knowing that is "our own rather than simply assuming that of others" (Pink, 2015, p. 41). The significance of memory and imagination is that these too can operate in a sensory form and indicate the temporal nature of emplacement. Both form an inextricable part of how we 'know in practice', and through doing sensory ethnography we can "use our own experiences to imagine how other people 'feel' their futures" (Pink, 2015, p. 47).

This conceptual framework offers a means for considering the whole context relevant to a child as inclusive of broad cultural influences that impact at local scale. This can be considered in relation to the diagram of the whole research context (Figure 2), which illustrates how these can be understood as operational across interconnective social and environmental systems. However, the contention from a holistic perspective is that there is influence in all directions across these relations, and this can be considered as an expression of life or the whole. This expression might be discerned through 'nature' in surroundings, as expressed through a child's way of being, or indeed within any individual's experience. The 'vocabulary' of consciousness structures (Gebser, 1949) offers a lens through which to consider the wholeness of this context, the potential for difference of experience and to value equally each form of relational expression. Such a lens enables the potential to ask different or new questions from those promoted through a dominant cultural orientation to individualised human experience. This research seeks to engage with a child's perspective and what this might offer to adults, and to place this at the centre of the whole context. This has been through use of a research tool that can enable doing sensory ethnography in these holistic terms.

4.5 The Use of Child-worn Go-ProsTM

4.5.1 Go-ProsTM as a Research Tool for Doing Sensory Ethnography

The practice of 'doing sensory ethnography' is shaped by emerging digital technologies and has been considered in relation to body-worn Go-ProTM cameras and described

according to a 'first person perspective digital ethnography' (Pink, 2015). This practice builds on the conceptual foundations of place as constituted by movement of all life which becomes interwoven as an 'enmeshment' (Ingold, 2008). In this way, the sense of a place becomes not that of a locality or of being "fixed *in* a locality" but as "open' and 'unbounded' intensities of things, persons and processes, always in progress." (Pink, 2015, p. 243). Such movement is therefore inclusive of 'intangible matter' such as energy, the weather, and emotions and thereby positions research as needing to find ways to follow people, things, sensations and feelings as ongoing and contingent entities. It is suggested that:

"Researching everyday life in its ongoingness and unstoppable flow presents a methodological conundrum in that we need to be both inside and seek to step out of everyday life in order to understand it and abstract it."

(Pink, 2015, p. 241)

First-person cameras offer the opportunity not only for 'capturing' a context, but for being part of the ecology of place, and offering a capacity to "record *a trace through it*, rather than a view *of* it" (Pink, 2015, p. 243). This approach therefore foregrounds a reflexivity in research activity, and consideration of 'ethnographic places' as "contexts with an ongoing temporality where the ethnographic past and its presence in the flow of the present lead to new ways of knowing" (Pink, 2015, p. 243). Technologies used therefore need to be acknowledged as both forming both a part of the context, as well as lending their affordances to research practices. Participants are embedded within this as a context characterised by an increasing ubiquity of digital media.

First person perspective recording devices such as Go-ProsTM are attached to the research participants and can therefore record the lines of human movement as they occur. Such recordings are characterised by the embodied and emplaced experience of participants and indicate the ways in which their moving bodies constituted an element of the environment in which the images are produced. These research materials cannot give insight into the ways that others know and feel but can offer "a new form of closeness" (Pink, 2015, p. 246) and a means for reflecting on another's situatedness within a specific ecology of place. What this cannot do is bring the viewer to a position of less bias, as

through the watching process they will connect to their own interior thoughts and emotions. This research process accords with a "first person feeling" and "second person empathy" approach, and highlights relations punctuated by "the camera, perception, the senses, affect and imagination' (Pink, 2015, p. 246). Instead, the idea of ethnographic place means it should be acknowledged that data produced adds to its ongoing movement, and continues to develop when joined subsequently by readers, viewers and commentators.

4.5.2 Go-Pros[™] as a Research Tool with Children

As a relatively new form of technology, there are limited examples of the use of Go-ProsTM as a research tool with young children. However, explorations of its potential have highlighted its advantages for such a purpose (Burbank et al., 2018, Green, 2016). Its novelty can be supportive to children's engagement and its accessibility effective in positioning children centrally in data collection (Dockett et al., 2011, Punch, 2002, Burbank et al., 2018). The wearing of a Go-Pro[™] removes the possibility for researcher decisions about what should be filmed and entrusts this to the child, and as such can be instrumental in removing the "unequal power relations that are so often present in traditional video research" (Robson, 2011, in Burbank, 2018, p. 323). In this way, there is the potential for the research to place emphasis on child agency and seek for this to be a co-collaboration between adult and child. This method has been used in research into children's experiences in natural environments described as 'Sensory Tours' and has offered the opportunity to "go where a child goes and see what a child sees" (Green, 2016, p. 286). The same method has also been used to explore young children's museum engagement, in which wide-angled, continuous recordings have captured a "first person articulation of the children's everyday relations with the world" (Burbank, 2018, p. 323). The hands-free nature of the Go-ProTM can support the potential for an intimate access to young children's 'one hundred languages' in which they "think without hands...do without head" (Malaguzzi, 2012, p. 7). It is not only Froebel that has suggested that there can be a lot that missed by adults in this process as highlighted by Malaguzzi:

"They tell the child

That the hundred is not there; the child says:

No way. The hundred is there"
(Malaguzzi, 1979, p. 7)

In this way Go-ProsTM can offer an illumination of "something that cannot be explained" (Green, 2016, p. 281) and is otherwise inaccessible, in offering an adult reconnection with a child's relations with the world.

This research tool can highlight the impact of adult and child height and perception on experience, and "makes apparent features of the environment of interest to a child that might go unnoticed or be taken for granted by an adult" (Green, 2016, p. 282). Such footage can illustrate the embodied nature of young children's relations with their surroundings, and this was highlighted as notably energetic and exploratory in a museum context. Movements captured were described in terms of children

"Examining minutiae, touching, feeling, peering around corners or through gaps in fabric, running, walking, creeping, dancing, to the furthest corners of a room and back again, following their friends, leading or checking their caregivers were close by and then, when confirmed, moving on again."

(Burbank et al., 2018, p. 325)

Such a catalogue of children's activity can illustrate some of their 'hundred languages', and the ways these are used in a 'cognitive mapping' of what is new in a space (Weier *et al.*, 2003). However, the question of children's 'interest' may not only relate to the physical nature of this meeting, but also to children's inner motivations and fascinations. Although Go-ProsTM cannot give access to a young child's thoughts and emotions, its footage offers "an insider's view of what they hear, say, touch and their interactions with others" (Burbank *et al.*, 2018, p. 315). A chest-worn Go-ProTM is positioned to capture their verbal expressions including moments of self-talk and "sharp intakes of breath...or brief moments of stillness or indecision" (Burbank *et al.*, 2018, p. 21), and these give indications of children's internal processes during their interactions. Such material offers an "intimate appreciation of how the children might be feeling" (Burbank *et al.*, 2018, p.

321), and therefore a contemporary tool that can give adults an opportunity to have "feeling to feel with the child" (Froebel, 1887, p. 73). Go-ProTM footage from a child's perspective can offer firm foundations for co-constructive research, that can listen more closely to children's voice through its capacity to engage with their physicality in the world (Burbank et al, 2018, Green, 2016). The continuous nature of filming offers a more 'holistic view' of a child's experience (Burbank et al., 2018), and this means that for processes of review that there may be many potential layers for analysis (Pink, 2009). The potential disadvantage of this research tool lies in participant consciousness of being filmed and an impact from this on behaviour. In both cited examples, children's awareness of the Go-ProTM fluctuated and this was evidenced in footage (Burbank et al., 2018, Green, 2016). Parents could be more conscious on a continuous basis and is a factor to be considered in relation to child and parent interactions. This effect was identified in adult and child interactions with museum displays in which "many parents acted very much in the vein of 'facilitators'" and in particular this involved "trying to help the children to take part in the perceived educational benefits" (Burbank et al., 2018, p. 324). It was observed that adults often persisted with this intention despite children being distracted and this was partly attributed to a parental awareness of their actions being recorded.

4.5.3 Use of Go-ProTM Footage for Sensory-Elicitation Interviews with Parents.

In this research, children's Go-Pro™ footage formed the basis for reflection with parents on shared experiences revisited from their child's point of view. Such research activity can be understood as an elicitation interview and involves the presentation of an experience to explore responses that might otherwise be inaccessible (Pink, 2009). This process involved reconnecting with parent memories of an experience, but alongside a new opportunity to explore how this might have been experienced by their child. Video footage holds a significant role in this sensory ethnography process due to its capacity as a mimetic medium. Filmic representation has been associated with the interconnected nature of sensory experience, and there is identification of a relationship between touch and sight associated with film (Lauwrens, 2019). These two senses share an experiential field as exemplified in the suggestion that "I can touch with my eyes because my experience of surfaces includes both touching and seeing, each deriving qualities' from the other" (MacDougall, 1998, p. 145). This is identified in film theory as outlined in the

suggestion that "if vision can be understood to be embodied, touch and other senses necessarily play a part in vision" (Marks, 2000, p. 22). Film holds the potential to activate memories, and these also involve all the senses. The use of video in ethnography is suggested to offer a reconnection with the non-verbalised ways of experiencing and knowing that are part of a research encounter (Pink, 2009). This is described as providing:

"a corporeal route to the sensorial and emotional effects of that research encounter, which themselves are ways of ethnographic knowing".

(Pink, 2015, p. 147).

4.5.4 The Means for an Adult to Have Feeling to Feel with the Child

This research approach, described in terms of "first person feelings" and "second person empathy" (Pink, 2015, p. 246), provides a means for exploring adult engagement with a child's ways of being. The function of video engagement for the purpose of this research is highly significant, and this is due to an understanding that "Our film experience relies upon our assuming the existence of a parallel sensory experience in others" (MacDougall, 1998, p. 53). Merleau-Ponty's philosophy has been drawn upon in proposing a 'resonance of bodies' through visual media in which there is a

"Synchrony between viewer and viewed that recovers the prelinguistic, somatic relation to others of infancy, a capacity that still remains accessible to us in adulthood".

(MacDougall, 1998, p. 53).

This is highly pertinent to a research engagement with the potential for an adult to have "feeling to feel with the child" (Froebel, 1887, p. 73). Considered in holistic terms, this might involve the sense of a young child's 'archaic' immersion in surroundings as a pure presence, or a 'magic' sense that their agency comes 'right up from their heart'. The potential being explored in this research is for an adult recapturing of this sense through sharing in children's experiences. Use of video footage can offer the potential to 'elicit embodied understandings' through playback of "ephemeral moments" (Spinney, 2008, p.

98). Through such processes there is then the possibility to "construct a vocabulary for the unspeakable" and for language to "play more of a role in how we understand and represent the embodied, the fleeting and the sensuous" (Spinney, 2008, p. 101). This can offer a means to explore whole human relations that value embodied interactions alongside those that are language mediated. An opportunity for considering that these may offer a qualitative depth to our relations that is important and can support a sense of belonging to surroundings of which we are a part. Child-worn Go-ProsTM on chest harnesses offer the viewer an encounter with an intimate capturing of a young child's embodied and sensuous experiences in the world. During the busy shared experience of an outing to a natural environment, adults may have been more attuned to verbal interactions with their child as well as their own relations to place. The experience captured by the Go-ProTM can shift focus and take an adult viewer back not only to an experience shared with their child and an opportunity to see this from their perspective but also a potential reconnection with their own childhood experience. This process can support an engagement with Froebel's holistic message and an exploration of what living with children can offer in our ongoing 'living development'.

4.5.5 A Meeting Between Researcher, Parent and Child's Perspective

The use of sensory elicitation interviews with parents can call upon a need for

"Enough rapport for these to be a genuine exchange of views and enough time and openness in the interviews to explore purposefully with the researcher the meanings they place on events in their worlds."

Questions were initially drawn up to promote a focus on children's experiences in the Go-ProTM footage (See Appendix 1) but I primarily sought for discussion to be prompted by the footage content and parents' responses. In the pilot study, these conversations with parents evidenced that engagement in this footage drew on parents close daily relations and knowledge of their child. This developed into conversation about family life and routines, and the role played by their local environment in meeting child and adult needs. These findings seemed to align with consideration of the child in a holistic context of relations, and description of their position within a family that acts 'as a unit' (Froebel,

1887). Based on the pilot study, I then drew up two sets of prompt questions to support discussion in elicitation interviews: one to support engagement with footage content, and one to support broader discussion of the child in their daily 'life world' or family context. However, I aimed for an open-ended interview that could be led by participants, and reviewed prompt questions at the end in seeking for interviews to address similar considerations (See Appendix 2). Interviews have been described as offering an opportunity to "interact in ways more intense than in everyday life, producing heightened reflections and new ways of knowing" (Pink, 2015, p. 80). These can enable broad discussion to support reflection on lives, beliefs, values and opinions in a focused way. Part of the interview involved discussion about where they liked to "spend time in nature" and following the exploration of methods on the pilot study, families were then invited to take the GoProTM away and explore its use in such activity. This aimed to support family inclusion as pre-school trips could be socially inhibitive for some parents, whilst still being facilitative in a more practical sense.

4.5.6 The Trustworthiness of the Research Findings.

The trustworthiness of research findings can be considered in relation to measures for qualitative research identified in terms of its credibility, transferability, dependability and confirmability (Guba and Lincoln, 1985). Credibility can be understood in terms of whether findings represent a convincing interpretation of the data (Guba and Lincoln, 1985). A means to support this that can align with a sensory ethnography approach includes triangulation, and this can be understood as a cross-referencing between different sources, methods, investigators or theories (Denzin, 1978). The triangulation that took place in this research includes a cross-referencing between child and adult perspectives on shared experiences, different theoretical perspectives in relation to findings and in sharing raw data with other 'investigators' in its dissemination. The parent interviews offered a basis for confirming the Go-ProTM footage offered a fair representation of shared experience and reflection on children's perspectives represented a cross-referencing pertinent to a holistic perspective. Drawing upon wider current theory in relation to findings could support credibility of data interpretation through the degree of confirmability that was offered between them. The sharing of Go-ProTM footage at conferences allowed children's voice to 'speak' and viewer responses could offer confirmation of its interpretation through a holistic lens. This effect was strengthened though the alterity of young children's 'voice' to that of adults at a conference, and this leant support to a confirmability of findings in relation to the theory under exploration. These considerations of credibility align with a sensory ethnography approach in seeking to knit established knowledge making processes together with potential new ways of knowing and routes to knowledge.

Transferability in qualitative research is understood as a "responsibility to provide the data base that makes transferability possible on the part of potential appliers" (Guba and Lincoln, 1985, p316). In this research this has been through an amassing of rich data in field work, its meticulous annotation and the potential this has offered for weaving child and parent 'voices' into the thesis to reinforce its strength. The dependability of qualitative research rests upon how well processes are carried out and this has been supported through use of a research diary in which all processes, changes in direction and decisions were recorded. The research diary offers means for an "inquiry audit" (Guba and Lincoln, 1985, p. 317) that can reflect on the actions taken, and this along with detailed notes attests to conscientious research processes. The confirmability of findings rests upon how well these are "internally coherent" (Guba and Lincoln, 1985, p 318) with inquiry processes, and this has been supported through the element of surprise in findings. It has been through the marrying of sensory ethnography with the use of a holistic lens that a coherent meaning has been found to quite 'ordinary' or 'everyday' data. It is this process that has offered a contemporary illumination of Froebel's holistic philosophy, and demonstration of its empirical relevance that offers confirmability through and within the research.

4.6 The Research Context

4.6.1 'Nature, Culture and Society'

The pre-school forming the focus of this research is in a suburban environment in the South-East of England. Originally this location was a village, but progressive stages of growth in the nearby town have affected a shift in the constitution of this space. While the original medieval village is preserved in the Northern district, the Southern district runs parallel to a connecting county road and has been subject to a continuing

urbanisation. This whole district now consists largely of private and social housing estates, retail parks, a large traveller halting site, industrial plants, distribution centres, work sites and it is beside an entrance to one of the main motorways through the region. The area is subject to a continuing development in housing, commercial sites and roads at the time of study, and therefore reflects the urbanisation process associated with barriers to children's nature contact (Soga et al., 2018, Cox et al., 2017). Such developments are occupying previous 'vacant lots' (Pyle, 2002) in the area, thereby intensifying human populations and eroding access to open space. This contributes to the continuing historical change in human occupation of this area but also experienced as immediate losses by current residents. Across this whole suburban district, there are three council-run play parks, two playing fields, and a large country park near to the motorway entrance. There is also private farmland, allotments, a newly developed riverside walk, and footpaths around the village in the Northern district. However, the issue for young families resides in accessibility as reaching these spaces involves long walks beside busy roads through the industrial estate. This leads to an increasing reliance on cars as the public transport is limited and is a challenge for families without a car, some of whom live in social housing without gardens or usable outdoor space. There are also two privately run play spaces in this locality, but these require expenditure to use them with children.

4.6.2 'Community'

There is a secondary school, two primary schools and two preschools in this district. The pre-school that is the focus of this study sits in the grounds of one of the primary schools and is run by parent-committee as a voluntary-independent setting. This pre-school had been in existence since 1978 and ran out of a portacabin but was awarded lottery funding for purpose-built premises in 2013 to meet the growing demand for its services. I had joined the Preschool as a manager shortly after this and contributed to the development of its newly expanded service with a focus on its outdoor provision. The staff team had identified impacts from increasing numbers of children and problems arising in behaviour management. I could see that developing the potential for free flow in and outdoor play could facilitate children's needs and sought to build staff confidence in its management. This pre-school highlights impacts from cultural change and the role of social structures in its midst and indicates some of the tensions implicated. Issues of funding, inadequate

support and rapid change in expectations of services can place heavy demands on professional capacities. However, this setting also offers a good example of the connective role such services can serve in line with a Froebelian conception of the kindergarten. Most families and staff live in the immediate locality and can get involved in pre-school life through parent-committee, thereby benefitting from its services and contributing to the local community in return. In considering a Froebelian conception of the whole context, this pre-school's community connections were relatively strong, but environmental connections weakened though urbanisation. This therefore offers a research context reflective of social and environmental influences impactful on child and nature relations and is therefore a relevant context for exploring the contribution of an educational paradigm shift.

4.7 Research Participants

4.7.1 'Child and Family'

The preschool is open 9am - 3pm five days a week and offers sessional care during these hours. There are approximately seventy-five children on the preschool roll at any one time, and families consist of a variety of working and non-working parents. The service is offered to children between two and four years old, and they attend from anywhere between two sessions a week to the full thirty hours of its provision. This is partly due to Government funding and current policy supports access according to a variety of criteria. This includes universal access for three-year-olds, early access to support two-year olds based on social need, and full-time access to support working parents. The children and families forming the focus of this research were recruited through the pre-school's invitation to join them on trips to nature sites in the locality, or though their participation in family involvement sessions at the preschool. The trips took place during normal preschool hours but were in addition to its regular service. Parents were required to attend with their children on trips, however, these were not compulsory and regular pre-school care was still available if needed. All children and families on the preschool roll were invited to attend any trips, regardless of whether they would normally be in preschool at this time. Access for all families was promoted by co-ordination of lift-sharing and offers an illustration of the facilitative role such institutions can play in addressing environmental barriers. The trips were organised to take place over the whole school year,

and these were organised in co-ordination with seasonal pre-school open sessions. This aimed to promote family access to nature in some small way across the seasons, as inspired by Steiner education and its celebration of outdoor seasonal festivals with families. The open sessions at the preschool similarly celebrated the festivals of Christmas, Easter and a Summer transition, and as part of these I offered some form of nature-based outdoor activity. Thereby, both pre-school trips and open sessions held similar intentions for promoting nature contact, and approximately thirty families attended trips, and most preschool families attended open sessions. This mixture of activity therefore facilitated access for parents in working or non-working circumstances and represented viable family inclusion activity for the preschool. The following model offers a guide to the year's planned programme of events.

Term	Planned family-involvement activity
1	Trip to the woodlands-based education centre at the local country
	Park
2	Christmas open afternoon at the pre-school
3	Trip to a local historical site
4	Easter Egg Hunt at the pre-school
5	Walk to local urban park with families
6	Trip to country park – open green space location.

Table 1: The Pre-school Research Activity Plan

4.7.2 Ethical Considerations

Children and parents were recruited to this research initially through a letter that outlined the overall research design (See Appendix 3). Parents could then choose to take part in the trips or activities with awareness that research activity was taking place, but without needing to become directly involved in research themselves. All trip participants gave written consent to this on preschool trip response slips. Parents were also invited to become a focus family in the research activity, with an explanation that this would involve use of a Go-ProTM to capture their experiences with an opportunity to review this afterwards. The focus of the research was outlined as an exploration of a child's perspective on the world in line with Froebelian philosophy (see Appendix 3). Research

participants have therefore been recruited from those families that chose to take part in visits or open session activities, and focus families were self-selecting within this. All participants were informed that could choose to leave the process at any stage, and that any research findings would be anonymised. Only two participants responded positively by letter, and most research participants were recruited on a face-to-face basis either prior to or during the trips or open sessions. Based on experience, this reflected the broader patterns of effective family communication at the preschool, which generally involved better responses through direct contact than other communication methods. It became evident through the process that face-to-face contact was more suitable as it enabled the children to be central in decision-making, and for their participation to be expressed verbally or physically. It was made clear that children could cease participation at any stage of proceedings, and that parents could respond to any non-verbal expressions of their child's wish to stop (Robson, 2011). The research process has complied with all preschool procedures to address data protection responsibilities, health and safety requirements, safeguarding, risk management and confidentiality. Parents in focus families gave written consent to their participation, and permission for any materials collected to be used for research purposes. This was with an understanding that all data would be stored safely and used purely for research activity. As the research process developed, explicit permission was sought from individual families for the use of film clips at conferences. A further issue that arose during the research process was related to families' independent use of the Go-ProTM in their locality, and its potential to capture other people in footage whose permission had not been sought. This issue was discussed with families when they were given the Go-ProTM and most footage featured only family members, and any featuring other people was not used in dissemination.

4.7.3 The Pilot Study

The research process initiated with a pilot study, which involved a pre-school organised trip to local stables. All families received an initial letter outlining the research focus and stating that activity would be taking place that they could be part of or not. Three participant families were recruited on the day, and this offered the opportunity to explore use of the Go-ProTM as a research tool. The pilot study children fitted the overall research focus criteria, in that they attended pre-school, their families chose to take part in the trip,

and they lived in the locality. These participants included a three-year-old boy and a four-year old girl who attended the trip with their Mum and a baby brother in a pushchair. The third participant was a three-year-old boy, and both parents were with him on the trip. All wore the Go-ProTM for thirty to forty minutes, and I accompanied the families, and wrote some observational notes about their activity. However, it became evident that this was quite difficult to do during activity involving walking and interaction. Also, parents tended to talk with me, which worked well as a walking interview, but disrupted to some extent the interactions between parents and children. Therefore, based on the pilot study's demonstration of the Go-Pro'sTM capacity to gather child-led data, this then became the main research tool in subsequent research activity.

Footage of the child's perspective on the trip was then used as the basis for a sensoryelicitation interview with two of the parents. The interview explored what was illuminated from the child's perspective, how this informed the parent's view of the trip, and discussion on this basis evidenced connections parents made between this and ongoing family life. This reflective process illuminated the influence that children could exert within families, and this included the outdoor locations they visited regularly, and day trips adults realised they enjoyed most. These findings offered insight into the influential relations between child, adult and natural environment in their whole life context. I therefore asked one family if I could meet them at an after-school location they visited regularly due to their child's repeated request to go there. This location was a dip in a recreation ground filled with trees and undergrowth that the family had named 'The Bear Hunt'. Mum described this as constituted by child-formed paths which her children loved to explore, and that they went there most days after school because her son would "go on and on and on about wanting to go on a bear hunt". I therefore met the family and accompanied them on a trip to this location which offered insight into child, adult and environment interactions and the family's ongoing connection to this locality. However, again, my presence disrupted some adult and child interaction through the potential for adult conversation. Therefore, a revised research plan was formed on the basis of the pilot study, which initiated with the pre-school trip, a sensory-elicitation interview with parents and invitation to take the Go-ProTM away and use this independently. The children in this research could be seen as effective in their influence on families, and this needs to be considered in relation to these as self-selecting research participants. Such families might be considered as predisposed to visiting natural environments through choosing to take part in such an outing. Also, that adults were comfortable to engage in discussion around family choices and activity. A larger sample set might offer greater variation in children's potential for influence on family activity, and this represents an aspect for future consideration.

4.7.4 The Research Participants

The subsequent research participants included nine focus families that chose to take part in pre-school trips or activities. This indicated that the activity was in some way facilitative or relevant to family needs, and reflection on this formed part of the discussion in sensory-elicitation interviews. All focus families lived in the locality, or in adjacent districts but travelled into preschool. All were self-selecting through direct contact by myself or pre-school staff, although two parents had also responded positively to the initial recruitment e-mail. The children were all current attendees at the preschool and included three two-year-olds, three three-year-olds and four four-year-olds, seven of whom were boys and three were girls. The families were of varying sizes: two were only children, and the others had either one or more siblings, and there were a variety of single and co-parenting families. This meant that when families took the Go-ProTM home to use it independently, this could also be worn by siblings up to the age of six years old. All families except one took part in the whole research process, with one dropping out after initial involvement during the pre-school trip. Despite problems associated with researcher presence, the insights gained from the pilot study were rich, and seemed relevant for inclusion in research findings. Each participant family across the whole research process has been unique in terms of life circumstances, backgrounds, interests and their engagement in the research process. Given this and the fact that the pilot study participants fulfilled the research recruitment criteria, it seemed valuable to retain these findings within the whole data set. The following table offers a guide to the research participants, including family constitution and locations at which they used the Go-ProTM. This table aims to aid engagement with research data referenced in the reporting of findings. The names of all research participants and trip destinations have been changed to ensure data is anonymised.

Table 2: Pilot Study Participants

Child – Name	Pre-school trip	Parent sensory	Family Use of	Family
and Age	Location	elicitation	GoPro	information
				(Siblings)
Emily	Stables and	Mum 1 hour	-	Baby brother
4 years old	surrounding			Jude
	grounds			
James	Stables and	Missed due to	-	Baby brother
4 years old	surrounding	illness.		Tyler
	grounds			
Liam	Stables and	Mum 1 hour	The 'Bear	Sister Ava
3 years old	surrounding		Hunt' and trip	6 years old
	grounds		to the seaside.	

Table 3: Main Research Participants

Child	Pre-school Trip	Parent Sensory	Family GoPro	Family
Name and age	Location	Elicitation	location	Information
Jake	Country Park	Mum 1 hour	-	Mum
2 years old	woodlands			9 months
				pregnant
Aisha	Country Park	Mum 1.5 hours	Visit to Winter	Brother
2 years old	woodlands		Wonderland.	Nathaniel
				5 years old
Ellie	Country Park	Mum 1 hour	Walk to nature	Sister Amy
3 years old	woodlands		reserve and	6 years old
			play date walk	
			to an urban	
			park.	
Noah	Participated in	Mum 2 hours	Country Park	Baby brother
4 years old	clay and twigs		woods, walk to	Luke
	activity at		the post box,	

	Christmas open		walk to the	
	afternoon.		local park.	
Tom	Local historical	Dad 1 hour	Walk to local	Sister Sara (6
	site.		park.	years old) and
			Walk around	baby sister
			local lake.	Eloisa.
Lucy	Local historical	Mum 1 hour	Dog walks at	Sister Becky (6
	site.		country park.	years old).
Sam	Local historical	Mum 1 hour	Garden	No siblings.
	site.		Miniature train	
			trip.	
Jack	Country parks	Dad 1 hour	Play date to	Sister Starla (6
	open green		Farm Park.	years old)
	space &			
	woodlands.			
Lewis	Country parks	Not pursued.	Trip to local	Baby brother
	open green		park.	Joshua
	space &		Playing in the	
	woodlands.		garden.	

Seasons: Summer, Autumn, Winter, Spring

4.7.5 Research Materials

Go-ProTM clips captured on pre-school trips were between fifteen to forty minutes in length, and this gave rise to approximately five hours of footage in total. Go-ProTM footage captured by families varied greatly, and this reflected their getting used to the camera and building familiarity with it being worn. This gave rise to approximately thirteen hours of footage, but some was unusable as fragmented, obscured or of poor sound quality. Therefore, after eliminating unusable footage from home-use, there remained approximately fifteen hours of child-led footage. This offered a rich, insightful data source and illuminated the potential of the Go-ProTM in capturing children's intimate

relations at the heart of the family context. The video data was accompanied by eleven and a half hours of recorded sensory elicitation interviews with parents and carers. When contemplating the annotation, coding and analysis of data I considered use of NVivo as a means for computer assisted qualitative data analysis (CAQDAS). However, after initially exploring the software and discussing its' potential with peers, I decided that this may not be best suited to my research needs. Such programs offer a means for coding data as a basis for thematic analysis, however I felt this did not support my focus on exploring the illuminative potential of a holistic analytical lens. My understanding is that a coded piece of data would still need to be accessed to engage with its holistic qualities. I therefore questioned whether CAQDAS coding represented the best approach and decided to remain with directly engaging with the rich qualities of research material as recorded in written notes on its multi-modal qualities. I initially viewed all footage and annotated instances of child and adult shared or parallel experience drawing upon multimodal approaches which attend to voice, action and gaze (Jewitt & Price, 2012). These notes were then used as a basis for a subsequent rewatching of research material prompted by use of the vocabulary for holistic lens as analytical lens. The same process was adopted with voice-recorded parent interviews which were annotated in their entirety and these notes used as basis for cross-referencing with instances highlighted in Go-ProTM footage by the holistic vocabulary. It could not always be guaranteed that there would be corresponding adult reflection on child-led activity, and this varied across interviews reflecting each parent or carer's engagement in discussion and the nature of their reflections.

4.8 Analysis

4.8.1 Analysis in Sensory Ethnography

Analysis within sensory ethnography takes place across the whole research process and can be considered as an ongoing ethnographic-theoretical dialogue. As a practice, such analysis can be inherently complex through paying attention to "experiential, imaginative, sensorial and emotional dimensions" and has been described as a potentially "intuitive, messy and serendipitous task" (Pink, 2015, p. 141). In recognition of this, a reflexive approach to analysis is therefore important and should attend to sensory experiences,

categories and research materials. In this way, there should be a situating of analysis fundamentally within the knowledge-production process, and a conscious acknowledgement of this as a way of knowing. Such analysis can be understood as emergent both within moments of particularly intense and systematic treatments of research materials, but also as an implicit element of ethnographic fieldwork. However, that it involves some degree of human intentionality and a process of abstraction but is not an activity that is isolated from either the researcher's experience or embodied knowing. This approach aligns with the interpretivist paradigm, and an identification of knowledge as essentially mediated by human subjectivity.

Doing sensory ethnography is associated with an intention "to understand other people's sensoria" (Pink, 2015, p. 148). This intention can involve engaging with the culturally constituted sensory modalities that participants associate with their experiences, and these might be linguistic but might also be demonstrated performatively. Therefore, when engaging in analysis in sensory ethnography, the modern western five-sense sensorium can offer one set of useful analytical categories to support understanding of embodied knowledge and practice. However, this sensorium is not universal to all cultures and may not always be sufficient to describe how we experience our social and material environments. It is therefore suggested that some ethnographic contexts demand that researchers seek new categories, and that these may emerge through the culturally specific engagements of the research process, or in post-fieldwork analysis (Pink, 2009). This is then a process of making connections between "complex phenomenological realities and the specificities of other people's ways of understanding these, and on the other, scholarly categories and debates" (Pink, 2015, p. 151). Attention is drawn through this to the experiential, to culturally discursive elements, to processes of condensing and translating and to the construction of a narrative and argument. However, it is identified that what is important is that the cultural categories that become the focus and structure of analysis "are produced only in relation to the multi-sensoriality of human perception" (Pink, 2015, p. 151). There are different sensory categories across western and indigenous cultures, however the potential for cultural difference explored in this research is that between child and adult. The thematic analysis adopted in this research will now be outlined and will include a rationale for using the theory of the evolution of consciousness (Gebser, 1949) as a set of sensory categories relevant to young children's experiences in nature.

4.8.2 Thematic Analysis

The Go-ProTM footage provided the starting place for my research analysis prior to sensory elicitation interviews with parents. Initial analysis involved watching the footage from preschool trips and making notes about children's activity, and paid attention to their interests, interactions with people and surroundings and the ways in which adults interacted with this. This process can be understood as an analysis of semantic themes which can be understood as those lying "within the explicit or surface meanings of the data and the analyst is not looking for anything beyond what a participant has said or what has been written" (Braun & Clarke, 2006, p. 84). Based on this annotation I picked out short (approximately five to ten minute) examples of each child and parent experience on trips. I made choices that could illustrate the nature of children's relations with surroundings as illustrated by their activity, interactions and interests, and concentrated on moments of shared attention, activity or interaction between adult and child. These then formed the basis for eliciting parent reflections on their experiences on the trip and considering this in relation to the broader contexts of their lives. I chose shared or parallel moments of activity and excluded moments when children were separated from parents, as although the latter were interesting, I did not feel that these supported the research focus. The parent interviews took place within two weeks of the trips so that memories were still relatively fresh, and these two sources of research material accumulated in parallel across the whole data collection process. A parent's viewing of their child's perspective is contextualised by their intimate knowledge of them, their wider life context and their own responsibility and motivation to meet their child's needs. However, sensory elicitation interviews offer an opportunity for parents to take time out of their busy, ongoing daily relations and to reflect upon what happens in a fleeting moment of this. As the research progressed, I chose examples from families' independent use of the Go-ProTM that could highlight a contrast between different environments and its influence on their activity. The elicitation interviews therefore drew from reflections on fleeting moments, their relations to family lives, and the interconnection of this with wider social and environmental contexts and memories. These findings therefore supported consideration of the child at the centre of their whole life context in holistic terms as facilitated by the underpinning conceptual framework of sensory ethnography.

4.8.3 Use of the 'Vocabulary' of the Theory of the Evolution of Consciousness

A second layer of analysis resides in the identification of latent themes, and these are described as "underlying ideas, assumptions, and conceptualisations – and ideologies that are theorised as shaping or informing the semantic content of the data" (Braun & Clarke, 2006, p. 84). As data collection progressed there was the accumulation of two data sources in the children's Go-ProTM footage from preschool trips and family activity and recordings of parent sensory elicitation interviews. These two sources offered parallel perspectives on a shared experience that could be compared. My initial analysis of these accumulating sources of material gave rise to identification of three broad avenues of influence demonstrated between child, adult and natural environment. These could be considered in terms of dimensions of time and included children's influence within moments of experience shared with parent or carer, their ongoing daily lives, and across the lifespan through enduring childhood memories in adulthood. I shared these as emergent findings on a poster at The Froebel Trust Conference 2019, and this prompted interactions that supported further reflection. One conversation with a play therapist centred on Froebel's identification of the relations between an inner sense of self, an 'exterior' world and the potential for a unity between them. The play therapist was interested in the potentially supportive role played by outdoor experiences, and our discussion referenced other perspectives or theorists that comment on the centrality of this relationship. This prompted me to reconsider the theory of the evolution of consciousness (Gebser, 1949) and its identified relevance to children's experiences in nature, adult memories of this and evolution of the self in relation to surroundings. I wondered what this could offer as an analytical lens for considering the findings, and the relations that were being demonstrated as enduring over time but occurring in a moment. I decided to draw upon the descriptors of consciousness structures, consider what each expressed and explore their potential relevance to research materials. This theory has been suggested to offer a "vocabulary to talk about otherwise difficult-to-acknowledge aspects of children's experience of the natural world" (Chawla, 2002, loc. 2602) and a "system of thought" (Chawla, 2002, loc. 2602) that can contain the relational qualities that children express. This theory might therefore offer a lens that can illuminate aspects of experience that might be missed through an adult orientation to dominant cultural discourses, and this would include my own as a researcher.

The vocabulary of consciousness structures can support acknowledgement of overlooked aspects of children's relations with the world, and through its holistic orientation promote questions about their relevance to adults. This theory can offer a means to equally value child and adult ways of knowing and being and the potential "consequences of each for individuals and the life around them" (Chawla, 2002, loc. 2624). This approach could offer a means to explore what is offered by living 'with our children' and to consider the underpinning vision of holism such a message promotes. Use of this analytical lens initiated with identifying the key descriptors for each consciousness structure, as a basis for considering whether and in what ways each might apply to footage-content. This process commenced with an analysis of annotations, followed by re-engagement with relevant extracts of footage or recordings. I started with the pre-verbal archaic consciousness structure, and this drew children's physical stature and interactions with surroundings into focus. This descriptor not only illuminated aspects of their behaviour that I may not have otherwise paid attention to but did so in terms of their potential significance in holistic terms. This theory frames consideration of the qualitative nature of these relations and their potential to support connection between individual and surroundings. I then consulted wider current literature pertaining to the qualities highlighted in data to explore its potential for identified relevance, impact or consequence. The highlighting of fundamental aspects of children's behaviour that one might otherwise take for granted, appears to align with the suggestion that adults should "give heed to the gentle admonitions" of children's lives (Froebel, 1887, p. 89).

I have chosen examples that illuminate the way in which this holistic vocabulary highlighted aspects of children's behaviour and cross-referenced this with parent reflections where available. Parent commentary could sometimes be relevant to consideration of behaviour in holistic terms but be expressive of this in unconscious ways. This synthesising process occurred through the writing of findings, and these form the next five chapters of this thesis. Analysis has therefore been led by the data and what I saw in it through use of this 'system of thought' (Chawla, 2002). The Go-ProTM footage offered examples of data captured in moments of experience led by family choices and opportunities, and these varied in the qualities of child, adult and environmental interaction supported. The extracts in the following chapters have been chosen for their potential to illustrate the qualities highlighted by each consciousness structure. These might be identified as quite subtle qualities that form part of everyday relations with

children, but it is the use of this 'vocabulary' that highlights these as 'gentle admonitions' to attend to the holistic nature of life. The instances in footage offered a varied source of data, with some particularly rich examples due to environmental qualities and family interactions, and some less accessible to the viewer due to the young age of the child. The parent commentary also varied with some discussions being more open and reflective than others. The vignettes in each chapter have been chosen to convey as clear a picture as possible of each consciousness structure, and to make this a more readerly experience to support understanding. However, these can be understood as representative of broader examples of similar instances that were demonstrated across different families.

4.9 Summary

Overall, this research process has sought to engage with an 'interweaving' of children's and parents' perspectives, researcher reflections, current theory and research and has drawn upon a relevant consideration of the broader contexts to which they refer. This process leads to a research context that is perhaps the epitome of 'messy' and complex, however, this has been led by the research process itself. It reflects an understanding of an 'ethnographic place' as "open' and 'unbounded' intensities of things, persons and processes, always in progress." (Pink, 2015, p. 243) and can also reflect a Froebelian orientation towards the whole. This holistic picture emerged through a research process with an initial focus on activity that took place during pre-school trips, but through analysis revealed its interconnections with a wider relational context. However, the initial focus on shared experiences between children, adults and natural environments remains in focus, and the research has continued to explore what is revealed in "a trace through" (Pink, 2015, p. 243) this whole context and the fleeting moments of experience captured by a child-worn Go-Pro™.

5 Archaic Consciousness

5.1 Introduction

The archaic consciousness structure draws attention to fundamental conditions of existence, and in this research, differences highlighted between adult and child in their environmental relations. This brings to awareness aspects of our experience that can often be taken-for-granted, and through this starts to illustrate what can be offered by this holistic vocabulary and perspective.

5.2 What is Archaic Consciousness?

Archaic consciousness is described as "identical with origin" (Gebser, 1949, p. 43), and is a state in which humanity does not yet differentiate themselves from their surroundings. It is suggested to be the dominant consciousness of animals and infants, but that we may re-enter this in later life when "in repose or reverie, when we are simply absorbed in our body and our place" (Chawla, 2002, loc. 2629). This state represents a human identity with the world, and this should be considered a source of wisdom. As a consciousness form it is described as "elemental in an immediate physical sense" (Chawla, 2002, loc. 2634), and has been drawn upon in considering children at play as "baptized in the world by immersion" when "up against the full sensory qualities of things" (Chawla, 2002, loc. 2637). Such experience concerns the operations of our autonomic nervous system as means for a vital exchange with the environment and this is suggested to often not be considered as a form of consciousness (Chawla, 2002). The description of this consciousness structure draws attention to the state of existence, and a human experience of this. It is also highlighted that an individual's receptivity to surrounding elements rests equally upon the conditions within their own bodies, and that receptivity is promoted when the inner need for love, food, and rest are met, and barriers of anguish, hunger and insecurity are dispelled. These aspects highlight the interconnection between an individual's inner experience and their relations with an exterior world.

In sensory elicitation interviews parents gave insights into the strong influential role that children played in their family outdoor engagement. This was through children's need for whole-bodied movement, and satisfaction demonstrated at the novelty of experience this made possible. Archaic consciousness can be considered foundational as it represents the means through which other structures of consciousness can occur and is the primary layer in an evolutionary process in which there is a widening and deepening human perspective. The use of the Go-ProTM has offered insight into children's potential to be absorbed in their bodily experience during outdoor play. Young children are in the process of developing their physical capacities, and this along with associated self-set challenges can be absorbing of their attention (Sutton-Smith, 1997). This directed attention can be accompanied by energy-levels differentiated from adults and an impulsiveness that is physically expressed (Sandseter, 2009). Findings that highlight young children's enjoyment of their movement will be shared first and will be followed by insights into children's absorption in place. These experiences of embodiment and emplacement are interconnected but are presented separately to highlight the influence young children can bring. Both types of interaction will be considered in terms of their potential to influence accompanying adults. This chapter is longer than those that follow as it fulfils this foundational role.

5.3 Absorption in the Body

5.3.1 Running

The Go-ProTM offered insight into children's potential to be absorbed in their body through their expressions of joy at running and moving at speed. The placement of Go ProsTM at chest-height captured aspects of children's emotional expression during such experiences, and this included language-use, vocal tone and sounds including laughter. These examples can particularly highlight the reciprocal nature of the human-environment relationship, illuminating the ways in which an environment can 'enable' human activity, and that human activity can be considered equally as a response to what it meets. In the example of children running, this was often an impulsive activity by children, and it could be seen that open space seemed to offer an invitation to engage with it in this way. For accompanying adults, this needed to be a space in which they could

relax about the potential for risk and could therefore allow children to follow their own impetus without needing to manage the potential for harm. This scenario offers an example of the agentic issues at play within the child, adult and environment relationship, and the ways in which human cultural orientations, which might also be considered expressions of consciousness structures, are imprinted into the spaces that we inhabit. The Go-ProTM footage demonstrated young children's enjoyment of running or moving at speed most frequently in parks, and this could be in play areas, along paths, in open grassed spaces or though undergrowth and woodlands. Some families also used the Go-ProTM to record their walking journeys to parks through suburban environments, and this demonstrated some examples of children running for short bursts along paths but was something that adults had to manage in relation to traffic levels on adjoining roads.

Tom Running to the Park

Children's verbal expressions when running could vary, and this was partly in response to the environmental context. Such expressions might be a narration of their own activity as a means for sharing their experiences with adults. One example included Tom calling out "Dad, I'll show you how to run...... jump!......jump!" as he carries out these actions as they near the park that they had been walking to. As a viewer one can hear the level of exertion in his voice as he gets out of breath, but also an opportunity to share in his excitement at having the freedom to move energetically, and for Tom, this is an experience that he wants to share in this close relationship. Other verbal expressions involve an exploration of the effect that movement can have on them, and this can be seen in another example of Tom and his dad on a pre-school trip to the local historical site. In this, they have been following the path with the rest of the group and Tom has been walking along a low wall beside his dad. However, as they reach a piece of open grassed space Tom says to his dad "Now?.....Run!" and he starts to run across the grass. As he does so, he makes a verbal noise which becomes a staccato rhythm with each step taken, and can be heard as "uh, uh, uh, uh". This verbalisation offers a clear example of a state of being "simply absorbed in our body and our place" (Chawla, 2002, loc. 2629), and the capacity of young children to "make themselves available to their material surroundings" (Rautio, 2013, p. 454) in an interplay between body and place. On seeing this piece of footage, Dad commented "As soon as he sees an open space, he's off". This seemed a close relationship and Tom a very vocal child, and this was demonstrated in opportunities

in which their environmental experiences were shared. Dad had been very keen to use the Go-ProTM and had said that he loved the little things that Tom came out with and could often be seen laughing with him. This close reciprocity in their relationship clearly illuminated the role played by the environment, and its facilitation of their needs as parent and young child.

Lucy Running into Open Spaces

Other examples of children's vocalisations included exclamations of a seeming sense of freedom in movement, that demonstrated the interplay between embodiment, emplacement and the emotional states that this could support. One example included Lucy and her Mum on one of their regular walks with their dog after pre-school in the local country park. Mum is pointing out pinecones that are on the ground as they walk, and Lucy is alternating between engaging with her Mum's invitations and wandering along nearby to her and humming. However, as they reach an open space, Lucy breaks into a run and says "Woohoo!". After a few steps, she stops and changes direction and says in a moment of self-talk "That way" and starts to run again into space. She calls to the dog "Tessie, tessie, woo hoo! Tessie", and again breaks into a run into an open space while calling out the dog's name. Reviewing the footage prompted Mum to talk about their familiarity with the layout of the park, and the habitual nature of their activities which she describes in the following way:

Once you get up the top there – you come off the path and go through what we call the secret garden...we go running around the secret garden...and what we call the Peek-a-boo tree. It's a bit silly, it's a set of three conifers, and we tend to sort of run around and hide.

This description illustrates a highly meaningful and personal relationship to place, in which the perceptions, memory and imaginations of this family regularly play out. It offers a sense that this feels like a very comfortable and safe space, and Mum repeatedly talked about how visits helped with the whole family's emotional regulation. This can be considered in connection with theories of attention restoration (Kaplan & Kaplan, 1989), and stress reduction (Ulrich *et al.*, 1991) which highlight the capacity of natural environments to have a positive impact on human affective responses. Such impacts will

be considered more deeply later in this chapter in connection with the potential to be 'absorbed in place', however here attention is paid to being 'absorbed in the body' as highlighted by the significance of open space. This footage demonstrated that the environment could offer family members freedom to roam and follow their own interests and impulses, but also to call upon each other's attention in moments too. This seemed to offer a very freeing and relaxing experience for all of them, and in considering the context as an 'entanglement' (Ingold, 2008), demonstrates the influential potential of a 'place' on the lives running through it.

Noah Running into Open Space

A similar example is provided in Go-ProTM footage of Noah and his family on a walk in the same country park, in which Noah reaches the top of a sloped path and starts running fast into the space shouting "I can't stop!". Eventually he runs into a low fence which then stops him, and Mum then calls his attention to a pile of leaves on the ground. However, Noah turns and runs again into the open grassed space calling out "I can't stop, I can't stop!". The Go-ProTM picks up that after a while his breathing starts to get heavier, and then he stops and joins his Mum in kicking the pile of leaves. This short scenario suggests that Noah had the opportunity to follow an impetus to experience his own movement through space, and once sated could then direct his attention to the environment as called upon by another. Mum commented on the footage extensively stating:

He loved the fact – heightened a bit – he was running and there was a fence, and he was saying "I can't stop" and the fence stopped him. The second time he was running, there's no fence, and I think it was a case of "Oh my God, I'm not gonna stop this time". So already, even in that short space of time, he's learned. I think he liked the experience of the freefall running. It was excitement that he might not be able to stop…" What possibly could happen if I can't stop?" – which he loved; you know.

These comments exemplify what the Go-ProTM can offer in terms of "a deeper insight into children's experiences of "being-in-the-world" (Heidegger, 1962)" (Green, 2016, p. 286), and the interview in "producing heightened reflections and new ways of knowing"

(Pink, 2015, p. 80). Mum demonstrated an appreciation of Noah's enjoyment in moving freely, and this might be considered in line with the suggestion that the Go-Pro™ can offer an "intimate appreciation of how the children might be feeling" (Burbank *et al.*, 2018, p. 321). Mum engaged with Noah's point of view in terms of his potential thoughts or feelings, and through this identified a learning experience. It also seemed evident that Mum enjoyed having an opportunity to engage with Noah's point of view on the world, and that in this case, having 'feeling to feel' with the child was a positive experience. In the interests of promoting my reflexivity as researcher, I now include a short exert from the interchange shared in the reflection process. This demonstrates my own positionality, and the way in which I share this with parents, as an adult engaging with a child's point of view on the world. In this way, it is possible to gain insight into the intentions of sensory ethnography for engaging in the way in which we can "use our own experiences to imagine how other people 'feel' their futures" (Pink, 2015, p. 47).

Me: Its lovely for us as an adult to see the child experience that sense of freedom.

Mum: Yeah, because I can't think of the last time that I ran and ran and ran...like...you know...you don't do that as an adult.

Me: No, you don't. I mean it would be lovely if you did... (we both laugh)

Mum: People would be looking at you are thinking "What on earth is she doing?" You know, children have the right to do that, whereas, as an adult, that right is taken away from you. Assign you to a loony bin, you know...

Me: Yes. Probably at **** Park...

Mum: It wouldn't get the same support that a child would...but the natural environment has definitely allowed us to have that...err...interaction.

My own comments are genuine responses to the footage and said with the intention of sharing this. It is interesting that Mum then makes a comparison between this experience and an identification of its absence in adults, and thereby the impact of socially constructed adult and child roles. In this way, the potential for experience in such spaces

can be considered as influenced by cultural norms, through which a child's state of 'being' is understood in terms of a freedom to follow impulses, and 'becoming' an adult associated with both a loss of this compulsion, and potential to follow it if they did. These comments and observations illuminate the way in which the whole context can be seen to permeate and shape the relations within it. The child's whole-bodied way of being can involve an impetus to experience their own movement, and therefore that open spaces can be read as an affordance for them to engage in this experience. A lack of obstacles mean that children can attend to this rather than on where to move to, and parents can be relaxed about their own role as facilitators. Children's size is significant as it means that a relatively small space can hold an invitation to children to run in it and gain an experience of freedom and means that adults can be in the vicinity without having to be alongside them. Mum identifies within her reflection the influential qualities of the environment in this case, and the way in which it enabled them the opportunity to share in this experience. However, it brings to light that if adults wish to engage in similar experiences, there may be social and cultural conditions that instead orient their activity to timeslots and goals rather than an impulse. This reflection highlights a key point of tension that lies in social constructions of 'being' children and 'becoming' adults, and pertains to a balance between playfulness, responsibility and our orientation to time (Burman, 2008, Uprichard, 2008).

Noah and Friends Move Together

Children's vocal expressions could also happen whilst travelling on something, and examples of this included buggy boards and a toy car. Children's vocal noises could represent either an exploration of the sensation of movement on their bodies, or be an expression of their emotions, and again seemingly represents an illustration of absorption in body and place and interaction between the two. Go-ProTM footage demonstrated the potential for an experience of speed, and excitement of this, and one example was captured by Noah in a toy car pushed by his ten-year-old neighbour on a trip to the local park. Mum is pushing the pushchair, and they are also accompanied by their neighbour's daughter who is eight years old and carrying a pocket kite. The Go-ProTM captures their whole walking journey through the suburban neighbourhood to the park, and within this the variations in their movement in relation to the traffic levels on the roads. A marked

difference is demonstrated in the groups' movement when turning from one of the through-roads on the housing estate into a cul-de-sac. The group wait for a car to pass and then all children break into movement together along the middle of the road. Noah initiates this by shouting "Let's go gooooo!" which he continues to shout as his friend pushes him fast along the road, and the little girl runs along beside them flying her kite. Noah screams "Weeeeeeeeee. I like your kite! It's so Beautifuuuuuuuu!! Waaayyyyy. That Was Fun....", and the whole clip offers an experience of movement close to the ground, accompanied by the children's expression of joy, for the adult to experience, or indeed, re-experience and share in its joy.

Children and Adults Move Together

The footage demonstrated that adults may not run when children run, due to a wide variety of practical or motivational reasons. Parents may be pushing buggies, walking together with others or lack the energy, motivation or indeed feel too inhibited to run when children do. However, there were some examples of the speed of adult movement being set by children, and this was partly due to concerns about their safety and seeking to keep them in sight. Some examples included two years old, whose movement can be understood as more impulse-led (Olson, 2010) and parent movement with them was often led by seeking to ensure their safety in unfamiliar spaces. In three further examples parents were led by four-year-olds whose curiosity, excitement and interest drew them to follow small paths through trees which meant that they would no longer be visible. In these examples, the children enjoyed having the freedom to choose paths and change directions which compelled them to move quickly, and parents then felt it important to keep up with them to know where they were. In the footage this involved verbal exchanges about what they were discovering, and what else might be hidden in the environment that compelled them to keep moving. Whether led by the exploration of their own capacities or possibilities offered by environment, in both cases, the adult speed of movement was dictated by the child.

This phenomenon within contemporary conditions has been described according to terms such as 'cotton wool' children and 'helicopter parenting' and the potential for negative connotations associated with an 'over protection' of children (Bristow, 2014). However,

this study explores the potential for positive multi-directional influence including adult embodied and emplaced experience being led by children in outdoor spaces. In two other examples children led the speed of parent's movement along suburban paths, which were judged safe enough in relation to traffic but hold enough risk to require them to keep up. In one further example, a parent ran with her child across a field to launch a kite and had talked about her own love of running which suggested that this was something she enjoyed. This was enabled by a safe green, open space which could enable a shared child and adult experience of being absorbed in the body. Reflections with parents demonstrated that their over-riding focus when joining children in movement lay in facilitating their needs, and therefore for that short period, this was a shared experience of embodiment and emplacement. However, because this was fast-moving, parents were not always conscious of any effects on themselves beyond feeling a need to manage children's interests, energies and above all their safety within the environment. Therefore, a qualitatively different experience of movement for adults that is not just an immersion in body and place, but one accompanied by responsibility and alertness to the potential for harm. However, through this focused attention on the child there was evidenced another avenue of influence, and this was in emotional contagion. This can be understood as the potential to "empathically share offspring's emotional feelings" considered as "integral to primary affective bonds and a healthy socio-emotional development" (Ebisch et al., 2008, p. 123). This was strongly evidenced in this research through a parental responsibility to facilitate children's outdoor movement and exploration. Within these circumstances, there were then examples of the ways in which children's freedom to move and an experience of joy through this could have a positive impact on parents.

5.3.2 Child Influence on Adults Through Emotional Contagion

Aisha Dances with a Fountain

One example included a family trip taken by Aisha, Nathaniel and their Mum and Godmother to a 'Winter Wonderland' event in a nearby arboretum. This activity is designed for entertainment and therefore offers a variety of sights and experiences to pay attention to. However, the Go-ProTM footage suggested that children's potential to move independently contributed to their enjoyment. This could be seen in their potential to run

ahead following their excitement to discover what was next, and to call out and communicate between themselves as a family group as they moved. When reflecting on footage, Mum commented on how this experience was for herself in accompanying them.

Mum: There's just one way you can literally go. It's nice that you don't have to worry. It's more relaxing as well. They loved it. It's lit up...it's really nice...so they can just run ahead...they're just being kids...they love it and explore it.

Aisha, who is three, spontaneously dances at certain points in the experience, and this is in response to music, but also to the movement of water in a display of fountains. Aisha, who is wearing the Go-ProTM can be heard laughing and seen to be spinning around. She moves into a space and says, "I'm dancing" and Mum responds with "You dancing bubba?". When Aisha stops, Mum says "Let's wait for the really high one...where is it?" and they watch the water fountain display together, and Aisha dances again with excitement when the fountain re-activates. When reflecting on Go-ProTM footage Mum commented that "She started to do the dance...I've got it all recorded" indicating that she identified this as a significant experience and a shared memory. This was a moment in which there was a child-led shared absorption in body, place, the movement that ran through them and an emotional response. Mum described her own enjoyment in parallel with that of her children stating, "You just get all kiddy out there", which perhaps captures a sense of the exploration, awe and excitement being shared. Certainly, the nature of the interaction, which involved both an 'entertainment' element, but also scope for free movement in response to this, was important. Mum identified this as an experience of freedom that was favourable to them when compared with the pre-school trip:

When you're with the school, you have to reserve a little bit how you are. Sometimes you think people are going to be opinionated on certain things – so you're a bit reserved. But if you're out there – then we're ourselves.

This comment might refer to a felt sense of difference in cultural capital between home and school (Bourdieu, 1985), and that this formed part of the sense of freedom felt within this experience for this family. This is an experience of a potential to move, to respond to surroundings and a felt sense of freedom from social expectations, and through this

illustrates the significance in considering the social and environmental context as interconnected. The footage later showed the children touching some large shiny Christmas baubles and Mum described herself as "a bit naughty" for allowing them beyond the barrier to do so. She knew the rules limited this but that her children would really want to touch them, and so enabled child and environment to lead their behaviour, and their enjoyment form the experience.

Noah Splashes in a Puddle

Another example of emotional contagion connected with children's movement was demonstrated on Noah's family walk in the country park. Mum points out to Noah a puddle on the path "oh, there's a big puddle, do you wanna go Splash?". Noah shouts "Yeah", then runs ahead and stops at the puddle. Mum catches him up and laughs "Wooooooah...You've got wellies on today!", and in reflecting on the footage comments that she doesn't often let him splash in puddles, as if he doesn't have wellies on, he can get cold and upset and she must anticipate this. However, on this occasion he can, and she shares in his anticipation. Noah hesitates, looks and then jumps into the middle of it. Mum laughs "Good splashing". Noah then gets wet socks, but Mum reassures him that these can be changed in the car, and they continue to walk. However, when they get to the end of the path Noah stops and turns saying "I wanna go in it again". He laughs, runs back to the puddle and jumps in it. Mum walks back and joins him at the puddle and celebrates the moment with him saying "Wooaahhh. That's very good jumping". When reflecting on the footage, Mum seems to identify with Noah's perspective on the experience, stating "They are like mini adventures within bigger adventures", and thereby demonstrates the way in which the child's point of view in the Go-ProTM footage can illuminate the issues of scale at play in their embodied experiences of place. She also states that:

Mum: It's nice to hear his voice and how excited he is. It's nice to look back on – at the time you're so busy in the moment.

The emotional contagion between child and parent is one that seemingly occurred during the activity, but can also be reconnected with, and can through this illuminate the richness within ordinary, day to day experiences. Mum further demonstrates her empathy with Noah, when watching him run back to the puddle, by identifying again with his potential thought process suggesting "It's like "you've given me licence to jump, I'm going to make the most of it!"". This offers an example of the scope offered by video footage for eliciting sensuous 'embodied understandings' through playback of "fleeting, ephemeral moments" (Spinney, 2008, p. 98). In this case, the description of archaic consciousness has drawn attention to an experiential absorption in body and place, and to engage with the potential this might offer from a young child's perspective. This might be contemplated as bringing into focus scope for extraordinary experience in ordinary surroundings and our holistic capacities as offering a means for this. Such processes can be considered in relation to associations between childhood nature play and proenvironmental adult attitudes and the potentially 'grounding' qualities of experience that is "elemental in an immediate physical sense" (Chawla, 2002, loc. 2634).

In line with the reflexivity of sensory ethnography, I also experienced emotional contagion through engaging with footage of children's experiences. Video is described as offering "a corporeal route to the sensorial and emotional affects of that research encounter, which themselves are ways of ethnographic knowing" (Pink, 2015, p. 147). Witnessing from a child's perspective their sense of anticipation at jumping in a puddle, and the excitement experienced in doing so, can be extremely affecting as a viewer. I would describe this as a contagious experience of joy, and that this was also demonstrated in the dissemination of findings through sharing such footage at conferences. Audiences would laugh with seeming fondness at sharing in children's experiences and have an emotional response to having their significance highlighted. This type of data has been described as offering an opportunity for "an evocative and nostalgic window into a child's world" (Burbank *et al.*, 2018, p. 325). The questions raised by this research include why we have such a response, what are its implications and does this hold a significance in terms of our potential for holistic relations?

5.3.3 Walking

The footage of children running offered a clear example of the state of being absorbed in the body, and highlights by contrast the other main form of child and adult movement through space observed in walking. Due to its slower speed the activity of walking may not be as attentionally absorbing, and thus enables a greater focus on the sensory qualities of the environment. Walking has been described as a form of 'purposive sensibility' in which there is "an intentional bodily force which manifests itself automatically and yet also sensitively" (Seamon, 1979, p. 40). This effect is identified as a symptom of a pre-reflective knowledge of walking and can be related to the notion of the 'bodysubject' (Merleau-Ponty, 1962) as described in the following.:

"The inherent capacity of the body to direct behaviours of the person intelligently, and thus functions as a special kind of subject which expresses itself in a pre-conscious way. It is usually described by such words as 'automatic', 'habitual', 'involuntary' and 'mechanical'".

(Seamon, 1979, p. 41).

This description of walking might therefore parallel archaic consciousness in highlighting the operations of our autonomic nervous system as a "vital level of awareness and exchange with the environment" (Chawla, 2002, loc. 2628). This state therefore not only involves attentional absorption in the body but also simultaneously with place, and walking has been described as particularly affecting the haptic sense, which involves an understanding of touch not only as "pressure on the skin" but also as "contact between the body and its environment" (Rodaway, 1994, p. 42). In this way, "Touch involves the whole body reaching out to the things constituting the environment and those things coming into contact with the body" (Rodaway, 1994, p. 44).

The child-worn Go-ProTM footage captured examples of children walking, both on preschool trips and local family outings. Often this was beside adults, but potentially this might also be with siblings and friends. This activity therefore took place in varying adult-child ratios across a variety of contexts, from one-to-one interactions to those shared with two or more other children. However, the participant families all demonstrated moments of shared attention between children and adults in which they walked along together. Given the young age of children, this walking together could often involve adults and children holding hands, and this might be instigated by either of them. Examples included journeys to destinations identified as beneficial for children such as a park or a nature

site. However, holding hands might also occur at the destination for example, when supporting children's physical activity such as balancing when walking along walls. The footage illuminated the way in which this shared movement through and in the world could be associated with a sharing of emotional states. This state of shared emotion was demonstrated particularly through an expression or request for care and reassurance, or love for the other.

Noah and his Mum Cross the Bridge

One example includes Noah's walk with his Mum to post a letter which involved crossing a dual carriageway by bridge. As they ascend the bridge, Mum becomes concerned about his safety and asks him to hold her hand. There are iron railings at the sides of the bridge meaning that pedestrians are exposed to the experience of traffic with a limited sense of protection from its effects. In reflecting on the experience afterwards with Mum, I referred to the lack of felt safety that seemed evident in that experience, despite there actually being limited risk of Noah fitting through the railings. Mum shared that her judgement at the time had been instinctive, and perhaps highlights the significance of an archaic consciousness at play that is highly visceral, subconscious and inherent to embodiment and emplacement. The following is an excerpt from our reflective discussion:

Mum: It's exposure to outside forces that lead me to holding his hand and closer to me – obviously protecting his safety as a parent.

Me: It seems like it's your instinct that leads you.

Mum: Yes. I haven't had that thought process. It's just "Oooh – there are gaps – you could fall down" ... and it's also knowing him and how impulsively he can act...because I know he's that way inclined. It's a tough one. I don't want to cramp his imagination and exploration, but at the same time, he's my child – I don't want him to die. Until the age when I can trust him to be more risk-averse himself, I will always be more protective of him potentially running off...or on the side of safety.

A consideration of archaic consciousness as an integral aspect of human perception might promote a contextualisation of risk-aversity in parents. The interchange above offers sympathetic insight into parents' decision-making processes at an instinctive level as part of their embodiment and emplacement. Such an understanding identifies the experiential qualities of environments as significant, and thereby no longer positions parents with a responsibility for negative repercussions from their risk-aversity. The Go-ProTM footage illuminates that as they continue their journey, Noah asks again what they are doing, and Mum prompts him to remember. A couple of moments later Noah then says "I love you" to his Mum and she tells him that she loves him too. This interchange can perhaps be considered an expression of enjoyment and appreciation of the whole experience for Noah, of going on a journey together with his Mum, her care for him and their sharing in experiences that are interesting to him. This seems to offer an example that resonates with Froebel's description of a child in a state of unity, which he captures in the following

"The child can scarcely tell which is to him dearer – the flowers, or his joy about them, or the joy he gives to the mother when he brings or shows them to her, or the vague presentiment of the dear Giver of them."

(Froebel, 1887, p. 56).

description:

In her reflections Mum referred to the value in having one-to-one time for them both, stating "I like to think he found it fun and exciting, and he got alone Mummy time – so it was an adventure". She then further reflects on the value of the whole experience in the following interchange:

Mum: My experience is that it was fun for me because it was one-to-one time. I want to maximise on that because I'm very conscious that I don't often get that with two.

Me: It's almost like a treat?

Mum: Yeah. I'm conscious that they grow up quick and these years are fleeting...so make the most of them when they are interested.

These reflections highlight an adult perspective on time that operates with a consciousness of it passing, and perhaps through this identifies something significant in the sharing of fleeting moments with children. These comments indicate an identification of their memory-potential within the present and for their experiential qualities to hold some significance. This might include a capacity for experiencing an everyday-joy and interest in life, and for an open-ness in sharing this with love.

Another example of children and adults walking and holding hands was demonstrated in footage of Ellie, Amy and their Mum on an outing during the Christmas holidays. This was to a local Nature Reserve but along a bridal path that had become extremely muddy and very slippery with the winter weather. Mum needed to manage the children's concerns about falling over and she calmly did this through verbal guidance and holding their hands to steady them. Mum's reflection on the footage highlights how much her attention is absorbed in the moment, and perhaps the benefit in having time and space to revisit this quite ordinary day-to-day experience from her child's perspective. She comments:

Its interesting hearing Ellie chatting away to herself. She seems a lot happier than she did then. You can hear me talking to Amy, so I didn't really hear it, and 'cause the camera's right there, I'm hearing what she's saying, and she does actually seem happier than I would have thought.

In relating this example to her broader experience of being out with her girls, Mum notices the significance of their holding hands. She states:

Ellie always likes to hold my hand, and even Amy – even when we're in a big open space, she'll happily hold my hand – when she hasn't got to, she's quite happy to do it.

This comment demonstrates that walking together and holding hands is something that the girls enjoy as much as Mum and represents one of their embodied ways of being "as a unit" (Froebel, 1887) when interacting with the wider world. Walking can be

contemplated in relation to the holistic conception of synchrony, and this is described in the following terms:

"The rhythms closely relate to our internal biological and psychological rhythms (Solnit, 2001, p. 5), following a regular pace, in synchrony with our breathing, heartbeat and the degree to which we are relaxed, nervous, anxious or determined."

(Wunderlich, 2008, p. 133)

This synchrony extends beyond the individual and highlights walking as "essentially rhythmic and an activity that interacts with and is influenced by other space and bodily rhythms". (Wunderlich, 2008, p. 136). This process is described from a behaviourist perspective as the effect of a stimulus-response cognitive process, and that recurring events such as walking paces can encourage similar behavioural responses (Hilgard *et al.*, 1974). Parents and children walking together can therefore be associated with the potential for emotional and physical synchrony, and as the examples suggest, can be considered in terms of a multi-directional influence between humanity, culture and environment.

5.3.4 Running Up and Running Down Slopes

Children's absorption in their bodies can be considered in relation to their own self-set challenges. These were demonstrated in Go-ProTM footage of children's responses to affordances in the environment that enabled them to climb, balance, jump, and run up and down slopes. This activity was in relation to play equipment, skate ramps, low walls and trees largely accessed in parks or other green, open spaces. Although similar examples of low walls or ramps could be seen in built contexts, children did not engage with these due to associated cultural boundaries around children's access to them. Children's perception of such affordances is differentiated from adults due to their stature, energy levels and prior knowledge. Affordances are defined as "the meaningful action possibilities of the environment" (Lerstrup & Konijnendijk van den Bosch, 2017, p. 49), and these need to be perceptible and identified as valuable and worth engaging with. In this way, there can be a separation between children and adults for whom environmental qualities will offer

different action possibilities. This difference is particularly evidenced in places designed for children such as parks and play areas, in which equipment traditionally designed for children often preclude adult access. However, in undeveloped spaces there is scope for such affordances to present an opportunity for parallel engagement by child and adult. Examples were demonstrated of both children's independent and parallel engagement with such environmental affordances, and the footage highlights that there is an influential potential exerted through children's energy, curiosity and physical exploration.

Liam on the Skate Ramp and Jack and Family on Woodland Slopes

One example involved Liam's discovery of skate park ramps as the family ascend the slope out of the 'Bear Hunt' dip at the park. Exploring the 'Bear Hunt' had involved a parallel family engagement in ascending and descending slopes, but as Liam runs ahead, he spies an opportunity that he cannot resist. He stops for a moment and turns back saying "Look!", but his compulsion to respond to its affordance is strong. He immediately starts to run very fast up the slopes, reaching the top and turning around to slide down them saying "Weeeee!". Liam repeats these actions up and down the alternative ramps, and the Go-ProTM captures the effort this calls for in his vocal expressions of "huh" and his increasingly laboured breath. Liam's laughing indicates enjoyment and the Go-ProTM captures a moment of self-challenge in his narrating "Ready... I need energy!" as he ascends the next ramp. In reflecting on what the family gain from such outings, Mum summarised this as "excitement and fun". This comment reflects a sense of emotional contagion from the children's experiences and the footage highlighting Liam's excitement, joy and fulfilment provides evidence for why this might be impactful. This example represented a child's independent engagement with such affordances, and therefore the potential for an adult to be influenced by this is more remote. However, in this case the Go-ProTM footage has enabled an adult to have 'feeling to feel' with the child and through this to be affected by a joy through absorption in movement in relation to place.

This example can be contrasted with a joint engagement with slopes demonstrated by Jack, Dad and his Nanna whilst walking through woodland. Their parallel adult and child

engagement with slopes meant that experiences were shared in the moment as demonstrated in the following extract.

Jack reaches a slope and runs up it, and the family follows. He reaches another set of crossing paths. "Let's go down. We can go down. Just be careful down there."

Dad: Why do we need to be careful honey?

Jack: Because we might slip.

Dad: Very good. Do you want to hold Nanna's hand then? Make sure Nanna

doesn't slip?

Jack No (laughing).

Dad: Oh, poor Nanna (We hear Nanny laughing).

Jack: Just be careful in these woods.

In this instance adults have been led into a 'children's place' (Rasmussen, 2004) of small worn paths up and down woodland slopes, and these were identified through a child's perception in which body, play and imagination are united. This is perhaps not a route that would have been taken without Jack's influence, and they experience the challenge of the slopes with shared humour. It is Jack's spontaneity and impulsiveness that can reintroduce adults to the potential affordances of surroundings, and perhaps a more immersive embodied, playful and exploratory relationship with them. This activity sits in contrast with the choice made by adults at the start of the visit to follow the constructed path: still an immersive experience, but qualitatively different in embodiment and emplacement. It is a holistic lens that can frame these seemingly quite minor differences according to the significance of their qualitative depth, with a reminder that our ongoing living development can benefit from being re-enlivened along its life path. Jack's enthusiasm to physically explore place and its risk is tempered by a reminder to "Just be careful". This might be considered significant if we see ourselves as "interdependent beings who are also always in the process of 'being' and 'becoming'" (Lee, 2002, in Uprichard, 2008, p. 7). From a holistic perspective, this can be contemplated according to the potential for "the germinating life of the child" to be combined "with the ripe life of experiences of the adult and thus fosters the one through the other" (Froebel, cited by Liebschner, 1992, p. 4).

5.3.5 Sitting, Bending, Slowing and Stopping

Although, there is the potential for running and walking to offer parallel experiences between adult and child, there are differences associated with height and experience that can impact on where attention is placed. Archaic consciousness is described as dominant in animals and infants but that it is possible to re-enter this in later life when "in repose or reverie" (Chawla, 2002, loc. 2629). Adults are therefore more likely to experience this form of consciousness when their movements slow down or stop. Repose implies rest and reverie the potential for "pleasant dream-like thoughts" (Cambridge dictionary, 2019), and both involve relaxed attention. This potential experience for adults can be supported through attention restoration theory (ART) (Kaplan & Kaplan, 1989) which highlights the potential for natural environments to promote a positive psychological effect. The potential is identified through ART for natural environments to enable human directed attention to "recover if it is allowed to rest" (Kaplan & Kaplan, 1989, p. 48). Natural environments can support this through offering qualities of 'soft fascination' that engage involuntary attention without monopolising attentional channel capacity. Mental restoration can occur through experiencing four characteristics most often found in natural environments described as 'being away', 'fascination', 'extent', and 'compatibility' (Kaplan & Kaplan, 1989). These qualities might be considered in terms of the potential for visitors to natural environments to feel 'away' from the daily stressors of life as they effortlessly engage (fascination) and feel immersed (extent) in the vegetation surrounding them in a setting conducive to their goal of being there (compatibility) (Izenstark & Ebata, 2016). The degree to which parents can benefit from this is variable depending on environmental qualities and the age and temperament of children. An environment that adults can feel more relaxed in about the potential risk to their children, will then support their own possibility for feeling 'away' and for attentional benefit. Any parallel slowing down of movement can enable adult attention to be drawn by the qualities of an environment that enable a 'soft fascination' and through this greater chance of being 'absorbed in place' (Gebser, 1949). In this way, slowing down and stopping means that there is greater chance for shared attention between adult and child on surroundings, and for the interconnected nature of embodiment and emplacement to be experienced in parallel.

Lucy, Becky and Mum Play Camps

The footage illuminated moments when children and adults stop moving, and if in an environment deemed safe for children, that adults can relax their attentions a little more. This might involve moments in which they stand, crouch or sit down together, and thereby the opportunity for shared attention or experience of place. Examples from footage demonstrate this happening in play areas with varying amounts of other children and families present, or in areas of undergrowth or woodlands, and this involved the family away from others. Within such moments of shared attention interactions are negotiated, however there is the potential for adults' environmental engagements to be influenced by children's whole bodied and sensory ways of being. One example captured by the Go-ProTM involved Lucy, her sister Becky and Mum as they reach the centre of woodlands at the country park and come across a den built from branches. Becky invites mum to come inside the den with them, and the following excerpt offers insight into their interactions.

Mum: Just imagine it's raining" and gets her mobile phone out for Lucy to choose a pre-recorded sound effect and Lucy chooses a thunderstorm.

Mum: It's raining, shall we get nice and cosy?

Becky: Mum, come in. (Mum crouches down with the girls).

Mum: What about marshmallows to toast on the fire? (She hands out imaginary marshmallows which the girls take, and then picks up sticks from the ground, passes one to Lucy and they engage in imaginary marshmallow toasting and eating)

Mum: Oh, look now I've finished with my marshmallow stick...oh look, that one's got a slug on it. See the slug? (She points it out to the girls)

Mum: I won't put that one on the fire, I'll put it over there (she places it away from the imaginary fire).

These moments of interaction capture adult engagement in children's play that is "close to the ground and up against the full sensory qualities of things" that adult height can remove them from (Chawla, 2002, loc. 2637). Mum's imaginative engagement is for her children's sake but indicates that her 'immersion' in this activity leads her into playful interaction with its environmental qualities. The suggestion to toast marshmallows was

facilitated by the abundance of sticks on the ground and represents an engagement of the body, play and imagination with the spontaneity of the environment (Rasmussen, 2004). Through the holding of a stick Mum then notices a tiny slug, and this too parallels the interest shown by young children in the minutiae of surrounding life to which adults can become accustomed and then start to ignore. Mum continues to engage with the girls' game by building a roof on the den with branches to stop the imaginary rain getting in, which she sustains while the children play in the den as a parallel immersion in play in the woodland. The lens of archaic consciousness highlights young children's whole-bodied and sensorial orientation to surroundings, and its use here highlights an ever-present opportunity for accompanying adults to be drawn into this alongside them. Such opportunities offer the potential for adult attention to be pulled back into the detail in surroundings, engage with this in multi-sensory ways and to have their imaginations sparked by its possibilities.

5.4 Absorption in Place

5.4.1 Child-led Sensory Engagement

Archaic consciousness drew my attention to children's absorption in their own capacity to move, its impact on their mood and that of accompanying adults. As consideration of this movement slowed from running to walking and so to stillness, this started to shift my focus away from an 'absorption in the body' and towards an 'absorption in place'. The Go-ProTM footage captured various examples of children and adults paying attention to the sensory qualities of the environment. This could be shaped by children's exploratory impulses which led them off paths, into undergrowth and direct engagement with the sensory qualities of surroundings. Children's attention could be influenced by being physically closer to the ground, and a curiosity related to the novelty of experiences. The potential effect on adults from this involved their attention being drawn back towards the 'taken-for-granted' in aspects of surroundings, and examples of this included echoes, shadows, soft feathers, sticky mud and the qualities of water. The potential for adult engagement with this can be more accessible through cultural acceptance of this behaviour in adults, as opposed to following an impulse to experience a sense of freedom through running into open space for example.

An extensive example of this is offered in the footage captured by Ellie, her Mum and sister Amy when walking to the nature reserve during the Christmas holidays. This footage was supplemented by Mum's reflective commentary and mobile phone photos that Mum was happy to share as research data. Amy demonstrated an interest in puddles in various Go-ProTM clips recorded by the family in different contexts. On this trip she talks with her Mum about a puddle experience with a friend at school whilst playing in puddles as they walk together along an unmade road.



As the walk continues there is an opportunity for this fascination to be extended, as they turn into the country park and walk along a bridle path on their route to a nature reserve. This path is not only wet but also extremely muddy, and as they make progress it becomes increasingly wet and slippery as previously shared. Unfortunately, the Go-ProTM battery ran low on this journey and didn't capture all of it, however the photographs and Mum's commentary enabled the potential to review this experience.



On reviewing the available Go-ProTM footage, Mum identified that the challenges were a significant part of the experience. She stated:

It was fun. I liked it. Sometimes when you're just walking, they get bored. Ellie wants to be picked up – she doesn't want to do all the walking. They just want to get to where they are going. So, when it's a bit more exciting on the way, you can see them enjoying it and they're happy, it makes me feel better. We have a laugh... we do bounce off of each other.

Mum identified that part of managing the trip involved not letting the girls get too wet or muddy on the way there, as experience told her that then Ellie would become unhappy and would probably want to go home. However, on the way back this was no longer a significant issue, and her response to the girl's activity was "Yeah, do what you want!". She then described this part of the trip in the following way:

Walking back was even better ...dunno...it just got even thicker mud... our boots were getting stuck. You know when you lift your foot up and your boot gets left behind! You've got to think about every step.

This description represents the epitome of being "simply absorbed in our body and our place" (Chawla, 2002, loc. 2629), which is something that children might readily engage in with puddles, but in this instance for the adult this is not a moment of repose or reverie. Here it is the environment that is exerting an arresting effect, in literally slowing down human interactions and thereby their attention towards it. Mum describes this sensory engagement primarily in terms of fun and identifies the stickiness of the mud in pulling on the sensibility of protective footwear as a manageable challenge to ordinary life. This led to their next environmental exploration which Mum led them in, as illustrated in the photos of her and Ellie in puddles and a nearby stream. She stated "That's in the little stream. We washed our boots off in there...my idea".





These findings illustrate the transition experienced during this journey, from a parallel adult and child engagement at the outset to a joint engagement on the return. This process was perhaps largely influenced by the environmental qualities that they encountered, but the whole scenario represents an interplay between the children, adult and the environment of their 'lifeworld' (Husserl,1936). The last photo offers an indication of the potential significance of this shared exploration and fun, and as Mum looked at the photo she smiled and commented "I just love that photo".



This photo illustrates the potential for nature-based family activity to support a strong 'we' are feeling in the family, through interaction with the spontaneity of the world (Izenstark & Ebata, 2016). This can be considered as expressed in Mum's description that they were "bouncing off of each other". Mum's reflections suggested that there was something significant in this experience of simply being "absorbed in our place, and the sensory qualities of things" (Chawla, 2002, loc. 2629). The simple, fundamental nature of this experience is expressed in the following thoughts:

It's just there. It's just there for you. The more you get out and experience, the more they want to get out and do it again. Sometimes you have to force them to go out.

The destination of the nature reserve might have been motivated by the research focus, but the footage, photos and Mum's commentary suggest that it was what happened along the way that was most impactful. These comments suggest that their 'life world' reflects a broader contemporary context characterised by an 'extinction of experience' (Pyle, 1978). As a process this is described as "sucking the life from the land, the intimacy from our connections" (Pyle, 1978, p. 146). Such findings offer an illustration of the holistic nature through which such processes occur, as an ongoing interplay between humanity, environment and ongoing relational effects. As Mum highlights here children can be subject to this effect too, but that perhaps within both the environment and our perceptive capacities, there is always the potential for a more fulfilling qualitative relationship. It is a holistic perspective and the archaic consciousness descriptor that has drawn attention to

the significance in experience, and through this to the potential value in simple everyday interactions between child, adult and environment.

Liam and Ava Enjoy Grass, Sunlight and Feathers

Further footage highlighting children's 'absorption in place' was demonstrated in Liam and Ava's experiences at the 'Bear Hunt'. These highlighted an influence from their differences in age on their relations with surroundings. Two moments of footage captured Liam's explorations in this overgrown dip in the local park as he ran ahead of the family. One moment shows him walking through a gap in the trees into a space filled with sunlight, and saying "Look, its morning! Look...Wow...Come". Mum then calls out to him "Alright" and follows him into the space. The second moment captured is of him running ahead down a slope and into a large clearing full of long grass, and he looks around the whole space and exclaims aloud to himself "Wow!". We hear Mum calling after him and then she enters the clearing while Liam is still standing and looking around the space and again repeating "Wow!". Such moments might be considered expressions of awe and wonder, and children's demonstration of this has been described as "moments of transcendence when the borders between the natural world and ourselves break down" (Sobel, 2008, loc. 204). Mum's responses in these moments are fleeting and form part of her ongoing interactions with children and place, however it is the potential to see children's perspective in footage that enables adult insight into this. The Go-ProTM captured Liam's embodied engagement with this place, in which from his height the space in the dip appears vast, and in which he is surrounded by grass at waist height that seemingly moves around him almost like a sea. From adult height this is experienced as a scruffy dip in the ground with broken glass on the floor and a view over the fence to the adjoining carpark. However, the child's point of view offers an adult the opportunity to be "up against the full sensory qualities of things" once more (Chawla, 2002, loc. 2637). Two further examples at 'The Bear Hunt' captured Ava's interactions, and at six years old these are slightly different. Ava focuses on details in the environment, the tactile qualities that she enjoys in them and connections she makes through them in her life world. In both cases she is drawn to feathers and her enthusiasm about this is shared with her family. As she picks them up, she shares this with an excited gasp and a call "Look I found a feather!" which Mum responds with an affirmative "You found a feather?" and Liam with a "Wow". In the second instance, Ava spies a feather high up on a grassy bank,

which Liam then wants to hold, and Ava wants to feel. As I am on this trip with the family, I lift Ava up to reach it and she shares her thoughts in saying "Ooh, it's really so soft. So soft I can't even feel it. Like my bunny rabbit. My bunny's really, really soft", and she takes the feather with her. Ava's attention and appreciation for the feather drew my attention to its qualities, and then also to recalling a toy panda I had favoured as a child due to its extreme softness. I have not recalled this memory for a very long time, and it is Ava's fascination with softness that leads me to recapture the significance of this quality to me as a child.

5.4.2 Drawing Attention to The Ordinary Once More

The vocabulary of consciousness structures enables an appreciation of the ways in which every day experiences can lose their capacity to absorb our attention, and the child-worn Go-ProTM can illuminate how it is both our physical and cognitive development that contributes to this. Such insight might be considered enlightening for adults, but this is more so if one dispels a negative overtone to the evaluation of this as a 'nostalgia' for childhood. Instead, that it is possible to give value to children's potential to illuminate something through their 'hundred languages' that "cannot be explained" (Green, 2016, p. 281). The theory of the evolution of consciousness promotes consideration that all forms of perception are important, and that children's potential for 'absorption' or 'immersion' in sensory qualities can remind adults of a potential for transcendence in experience. The embodied and material turn are drawing attention to the reciprocity in humanenvironment relations, and it has been suggested that "recuperation of the incarnate, sensorial dimension of experience brings with it a recuperation of the living landscape in which we are corporeally embedded." (Abrams, 1996, p. 65). Sharing experiences with children offers adults a different experiential mode, and this is one that is described in the following terms:

> "Bodily memory and imagination have great potential in the child stored in their feet and hands. These are how the child perceives the world: as neither internal nor external".

(Rasmussen, 1992, p. 82)

This research has explored a method and holistic analytical lens that promotes the value in shared experiences mediated by children's 'one hundred languages. These are languages that can draw adults away from accustomed cognitive relations and back into embodiment, emplacement and the experiential qualities these support.

5.5 Summary

Drawing upon the vocabulary of the archaic consciousness structure has drawn attention to the value in experiences gained through embodiment and emplacement. Considering this in relation to adult and child outings has highlighted the potential for influence that lies within these. The Go-ProTM footage has illuminated children's influence on accompanying adults through the nature of their embodied engagement with surroundings. Children move their bodies in physically active ways, which can influence adults alongside them in both physical and emotional movement. Children seek direct contact with the living systems in their surroundings, and this can draw adults into experiencing a direct contact with them too. Consideration of children's 'absorption in place' has drawn attention to the multi-sensory nature of their interest. It is this that highlights for adult attention the sensory qualities held by the 'ordinary' and 'accustomed' in surroundings. The holistic perspective and vocabulary of archaic consciousness promotes consideration of an ever-present potential that lies within our own holistic relational capacities and through this the scope within given circumstances to deepen our connections with surrounding life. This is through the potential for an "attentive awareness to what is there in the slanting light, within reach of our fingers, and near enough to taste" (Hoffman, 2013, p. 149). Archaic consciousness is suggested to offer a "level of real identity with the world around us" and therefore "human wisdom regarding our part in nature" (Chawla, 2002, loc. 2634). This description can be considered in parallel with a Froebelian description of the natural world as the "external form in which man's destiny is expressed" and our human senses as "the organs that enable him to meet that invitation" (Froebel, 1887, p. 42). This research activity in seeking to synthesise past theories, current perspectives and empirical engagements will continue in the next chapter through use of magic consciousness as an illuminate lens. This builds on an understanding of this foundational experience by considering the quality of relations that this can support.

6 Magic Consciousness

6.1 Introduction

The magic consciousness structure builds on foundations of archaic consciousness. It is through the experience of embodiment and emplacement that there emerges a sense of self in separation to surroundings. This state gives rise to relations between 'self' and 'other' but as this is emergent it is with a stronger degree of reciprocity. The existence of relations introduces the potential for our own agency in shaping these and can be understood as our human capacity to create with surroundings. This can be considered as our potential for 'magic' and drawing on this descriptor drew attention to children's creative play and exploration expressed through recognised nature play motifs (Sobel, 2008). Extracts from footage will be shared that raise consideration of these relations, our creative capacity and the potential to consider 'magic' as a human agency that is 'in tune' with wider life.

6.2 What is Magic Consciousness?

Magic consciousness joins archaic in being concerned with pre-linguistic behaviour. This consciousness structure forms part of a spiritual evolutionary process through which humanity separates from surroundings and can then re-join it with awareness of its value. At this stage separation is emergent and humanity starts to build a sense of its own agency. This is described as "a vital experience that apprehends the power of our connection with the world" (Chawla, 2002, loc. 2639) as a "silent intuition of the world's power and our own power" (Chawla, 2002, loc. 2646). Within this emergent state there is a greater sense of mutuality with surrounding life, and the nature of this relationship is described in association with the hearing sense. The metaphor of 'the labyrinthine ear' is used in describing this and can be understood as expressed through oral cultures. The ongoing inter connective nature of this state is expressed in the following terms:

"Whenever we begin to reconnect with the non-verbal world of embodied presence and listening (in every sense of the word), when we begin to hear and so gehören – belong – to what we hear, we attune...ourselves to the magical structure".

(Johnson, 2019, loc. 1016)

This is therefore an embodied sense of self and surroundings not yet subject to the defining effects of language. It is instead more attuned to ambient sound and the potential for harmony within this. In its effective form this consciousness structure is suggested to give rise to humanity's "budding agency" (Johnson, 2019, loc. 946), as in moving beyond an identity *with* the world in the archaic structure there is then an emerging potential for 'having' a world, and for acting upon it. However, in its defective expression this gives rise to a fear of the other and their potential power and finds expression in a compulsion "to rule the outside world – so as not to be ruled by it" (Gebser, 1985, p. 51). The potential for humanity to make with the world can be considered according to a 'magic' shift, and this is expressed in co-creative human-environment relations in which there is a "visible interchangeability of the real and the symbolic" (Gebser, 1949, p. 48). It is suggested that

"The magical world is a liminal substance, to which we must answer an ambiguous "yes" to the question of whether or not it is made up of matter or meaning".

(Johnson, 2019, loc. 987)

Human meaning making capacities form an integral part of life's ongoing development. Thereby, matter and the meaning that we give to it are inextricably bound up together and it is our responsibility to act within this with awareness. Attention to the potential for a 'magical shift' between meaning making and the matter that surrounds us might be considered demonstrated for adult witnesses in a young child's play in natural environments. Their open-ended interaction with its malleable qualities can be imbued with a creative exploration that sits in contrast with an enculturated adult perception.

The concept of 'magic' can defy rational explanation and therefore be dismissed from the 'rational activity' of research (Chawla, 2002). However, drawing on this description has highlighted examples in the data of self-other relations, and a creative engagement with surrounding life expressed through children's activity. The Go-ProTM footage demonstrated self-other relations most clearly in family encounters with wildlife, and this

included the birds, squirrels, rabbits and insects living in local green spaces. Children demonstrated a curiosity about the animals' lives asking 'big questions' about our relations with them (Meehan, 2017), and this behaviour can align with the 'nature play motif' named 'Animal Allies' (Sobel, 2008). Nature play motifs can be understood as recurring patterns of play that children engage in "regardless of socio-economic status, ethnicity, or ecosystem...when they have safe free time in nature" (Sobel, 2008, loc. 307). 'Animal Allies' describes the strong feelings that children can demonstrate towards animals in early and middle childhood, which can be expressive of either an inherent empathy or potential fear. Examples of both types of response to animal life were demonstrated in data, and an influence from this in adult and child interactions. The magic consciousness structure also highlights humanity's 'budding agency' (Johnson, 2019), and drew attention to children's creative activity in relation to surroundings on family walks. This could be seen demonstrated in the nature play motifs of 'Adventures', 'Maps and Paths' and 'Fantasy and Imagination' (Sobel, 2008), and children's enthusiasm for exploring new environments and choosing directions through them. This could be accompanied by an imaginative engagement with what they might meet on the way, and adults joined children in this activity as they wished to keep them in sight. In this way, children could be seen to draw adults into imaginative activity alongside them and this highlights the scope in present circumstances for adults to re-experience the 'everyday adventures' and 'ordinary magic' of childhood (Gill, 2012). These two aspects of activity can offer a deep relational learning in family outdoor activity, and the contribution of children within this through their demonstration of our human 'magic'. Examples from footage will now be shared that illustrate the nature play motifs and consider the ways these link to the description of a magic consciousness.

6.3 Questions About Self and Other Relations

Noah's Encounter with Pigeons

One example of the nature play motif 'Animal Allies' involved Noah and his family's encounter with pigeons in the country park. Dad pointed out that some pigeons had settled on trees approximately one hundred metres away and Noah impulsively ran across the

grass to see them. The following offers an excerpt from the conversation that ensued between Noah and his Mum as she followed him.

Mum: They're eating their dinner, I think.

Noah: Do they like eating leaves? (As he excitedly runs across grass covered in

leaves towards the pigeons) Do they? (Gasps) They flied away?!

Mum: Never mind (mum reinforces her statement with the expression of a shrug)

Noah: (Gasps) Only one (a very disappointed voice)

Mum: Don't worry.

Noah: (Gasps, as he continues to walk towards them) The others are walking away? (Disappointment)

The others are walking away (starts walking towards mum, sounding bewildered – like he doesn't know what to do)

The others are walking away (he sounds a bit cross) I just want to look at them.... (Sounding a bit annoyed as he walks towards his mum who is walking up to join him).

Mum: Why are they flying away? (Mum asks this as a reflective question whilst demonstrating a shrug)

Noah: Cos they didn't want to see me (sounds very sad)

Mum: It's not that darling, it's because you're bigger than them so perhaps they're a little bit scared of you. They don't know that you're a very nice person. They were just a little bit scared because you're a lot bigger, that's all. Just say "Don't worry pigeons, I'm very nice really". They've gone to look for some food now I think darling.

Noah: (still looking towards the trees) But I will say to the pigeons "Don't worry, I am a nice person".

Mum: That's right. You're a nice boy. "I won't hurt you" ...Good boy. Right – Where's Daddy then?

Noah: And I won't tread on them.

Mum: No, you won't, will you?

This interchange offers an illustration of the learning that resides in the influential relations between young children, adults and environment. The nature of this encounter with 'other' life represents a learning for Noah about his relations with this in the world, and an expression of his sense of responsibility in managing this. Mum's interactions

indicate a strong identification with her young child's emotions, and a concern about his developing sense of self with awareness of its significance for future relations. However, this primary motivation arises in direct relationship with the wider life of which his own is inextricably part. It is Noah's curiosity that leads his Mum into a conscious engagement with these issues and a negotiation with the balance in which these relations sit. Noah's learning in this process is demonstrated and this encompasses an apprehension of his own power in relation to the world. It finds expression in an impulsive potential to physically overpower other life, that sits in balance with an awareness of this as ultimately unacceptable. The sensory elicitation process offered an opportunity for adult reflection on this 'fleeting moment' in the 'ongoingness' of their everyday lives. The following extract reveals Mum's thoughts which arose through re-engagement with this experience from her son's perspective.

He's very disappointed (her voice sounds downcast) ... I can really hear it in his voice... Aaah.

What I find interesting is "they didn't like me", so...at this age, they're not aware – because of characters like Peter Rabbit, animals are personalised, so in his mind "I could be friends with a rabbit". Do you see what I mean?

We as adults don't think whether they like us or not, they're a different species – but for a child, and it might be because of the Peter Rabbit stories and so on... So just reflecting...in his mind, it might be "Why can't I be friends with a bird? and then why doesn't he want to come and talk to me?" They don't actually talk to you in real life.

It's just interesting he said, "They didn't want to be friends with me". That's what stood out for me in that clip.

Mum clearly expresses her primary instinct in wishing to protect Noah from an experience of hurt, which perhaps takes priority over the needs of the 'other' and can be considered in relation to her parenting role. Mum also identifies the Peter Rabbit story as potentially problematic in mediating a young child's understanding of the world by supporting expectations that are unrealistic. The role of storying will be considered further in the

next chapter on mythic consciousness, but here, it will be highlighted that Peter Rabbit might be considered expressive of an anthropocentric culture that promotes consideration of life primarily in human terms. Storying can be understood as a meaning-making process, and that this can operate in framing human conceptions. Their content can therefore be considered deeply significant and that they hold an important role in contemporary conditions, as expressed in the suggestion that 'it matters which stories tell stories, which concepts think concepts.' (Haraway, 2016, p. 101). It has been asserted that "the stories of Western philosophy, economics and science are not offering a way out of the world's precarious situation" and that "if we are to survive the current assault on the Earth's processes, we need to rapidly find ways to think differently, very differently" (Merewether, 2018, p. 14). Children's stories can therefore sit within and form part of the expression of bigger cultural stories, and it is the fundamental relations that these pertain to that can be illuminated in such momentary encounters. Mum highlights this in her comment on the potential to be "friends with a bird" that is a misconception promoted by adult authored literature or media. However, perhaps for children this is a question born not necessarily from stories but an openness to relational possibility, and offers a question born out of children's innocence that is significant for adults to consider. The stand-out message for Mum concerned Noah's 'self' concept rather than that of the 'other' and reflects not only her parenting role but the potential for fear in our relations. As Noah's playing with the idea of treading on the bird indicates, there is always the potential for an unmediated instinctive response "to rule the outside world – so as not to be ruled by it" (Gebser, 1949, p. 51). This is a crude expression in childish terms of our human potential in relation wider life, but it is this voice that speaks outside of our enculturation that raises powerful questions. This has been facilitated in this research by placing the child's voice at its centre and engaging with a consideration of our holistic relations by attending to what is expressed.

Tom's Encounter with Woodlice and Spiders

Another example of an everyday encounter between self and other was demonstrated in Go-ProTM footage of Tom and his dad at their local park. Dad is sitting on a picnic bench and playing with Tom who is very energetic, then Dad spots a nearby tree which he suggests that Tom might like to climb. As they walk over towards it, they notice that there are some holes in its trunk.

Dad: Ooh, what's in there? (In a mock scared voice) Come on, lets show the camera – Look – ughhhh! (As they point the Go-ProTM lens into the hole).

Tom: Spider web

Dad: Oooh yeah look there's spiders in there isn't there? (In a mock voice of fear and fascination)

Tom: Yeah

Dad: Come on, let's do your climbing away from the spiders. Right, climb...go...Ugh! Good boy!

Tom: There's a spider web. No, no, no no...not on the spiders (sounds worried).

Dad: You're not on the spiders. Put your foot on this bit ready? Go, go, keep climbing...

Tom: Oh look, there's a pond (Pointing to another small hole in the trunk)

Dad: Oh look, what's that? Look, show the camera (the Go-ProTM then gets closer to a woodlouse on the tree trunk). What is that?

Tom: A spider (He sounds a bit scared)

Dad: That's not a spider, that's a woodlouse. There's another one. There are two woodlice.

Tom: I like dem.

Dad: Yeah? Do you know who doesn't like woodlice? Grandad.

Tom: I do

Dad: Grandad's scared of woodlice.

Tom reaches out his hand to touch it.

Dad: Are you being cruel to him? Be gentle. (Gasps) Ooh. It's scared of you (the woodlice start to move away from Tom's hand).

Tom: Yeah

Dad: Its 'cos you're very big, aren't you? Oh, there's another one here, look. (Dad points to one higher up on the tree trunk).

Tom: He likes me...let's get him down.

Dad: We have to leave them because that's where they live. We have to leave them in their homes, don't we?

Tom (in a scared voice) Chase that spider, look. (pointing)

Dad: ooh, yeah, look.

Tom: Chase that spider...

Dad: Ugh, come on then, let's get down now....

This moment is driven by the identification of a physical challenge, but the fact that this is on a tree enables experiential learning in the encounter with wider life. Through being with a lively three-year-old Dad is drawn into close observation of other life forms, and this moment becomes an everyday encounter and an associated fear and respect. This is played out across what has been identified as a more typically biophilic response in children and a more biophobic response in adults (Hyun, 2005). Biophilia can be understood as a fundamental, genetically based human "urge to affiliate with other forms of life" (Wilson, 1995, p. 416), and that a failure to allow this to flourish during childhood can lead to the opposite state of 'biophobia'. These issues highlight the significance identified from an evolutionary perspective in promoting children's direct contact with the living systems of our world. This is to redress a cultural imbalance that has developed through our biological evolution, which we can rebalance through meeting a fundamental human need to affiliate with wider life. (Kahn et al., 2009). Dad plays with the ideas of fear and fascination in his response to the insects and does not feel the need to hide the potential for an adult to dislike them. This interchange reflects the nature of current concerns about children's loss of contact with nature: there is a recognition that children express this fundamental human need, and that this experience in childhood represents the key to re-establishing healthy human-environment relations. Dad's free expression of a more biophobic response might be considered to express the effects of current enculturation through which humanity has learned to consider themselves in separation to a wider life. Despite initial trepidation, Tom's response is to like the insect and be interested in whether it also likes him, and this has been suggested to offer an important example to accompanying adults (Hyun, 2005). This contrast in seemingly instinctive orientation has been highlighted as significant, and is suggested to raise questions about what "we adults need to learn from young children to respond to biophiliac ways of exploring and understanding nature?" (Hyun, 2005, p. 208). In this example of Tom and his dad, respect for the animal's life sits in the balance of fear and fascination and is contextualised by the existing conditions of their wider relational context. An onus on humanity to take care of other life is implied by differences in scale and capabilities, and this encounter prompts the adult to consciously express this, and thereby frame this as significant shared learning.

Such moments can be described as children's "sweet nothings" (Little, 1980) and occur in everyday encounters with surroundings quickly forgotten. However, in contemporary

environmental and social conditions such ineffable moments may be shared with adults, and through this start to draw attention back to the details in surrounding life. Through a holistic lens children's interests and questions can be revalued as a source for a reenlivening of relations, and this is through fresh eyes and big questions that highlight the nature of our relations with 'other'. This potential in children has been identified as an "inherent empathy" with animals which they express in a "first impulse...to pick them up, hold them close, take care of them, and become them" (Sobel, 2008, loc. 445). The play motif of 'animal allies' is described as the effect of a "merged experience of subjective and objective worlds in early childhood, an inability to differentiate between what happens to you and what happens to someone else" (Sobel, 2008, loc. 460). In this research, this has been evidenced in children's consideration of whether the wild animals living in their world like them, or if they can be friends. There is the identification of an advantage in this attitude from an ecological perspective, and that such experiences offer "an opportunity to create empathy, a feeling for other creatures that can develop into a willingness to care" (Sobel, 2008, loc. 460). The children in this research evidenced this type of interest in the animals that they encountered or had as pets and is an attitude that "makes animals and people part of one larger family" (Sobel, 2008, loc. 460). This is an attitude that can promote the facilitation of relations and is therefore an important attitude to preserve and enable to flourish as biophilia (Wilson, 1995). From a holistic perspective, this a relational potential that is ever present within our holistic capacities, and that experiences with children can be valued as reminders to adults of our capacity for care.

Aisha's Encounter with Birds

The potential for children to influence adults in their questioning about the world is also exemplified in a reflection by Aisha and Nathanial's Mum on a shared walk. During the sensory elicitation interview Mum had talked about growing up in a city and having very little engagement with the natural world prior to having her children. Now she was learning about wider life alongside them and felt she enjoyed it more because of this:

This year I've done what I said. I've been paying for entertainment – but now - we're going to try and <u>make</u> our entertainment. One thing we did was take photos of their favourite things when they're out – so we'll go for a walk, and they take

pictures. Nathan takes pictures of lorries, trees and stuff like that...and then it was weird...they were taking pictures of nests and stuff like that. I had to try and explain why there's a nest in the tree – so I've got to start doing some learning myself.

It is therefore the children's interest in nests that draws Mum's attention to them and sends them all on a quest to find out more. In parallel with the two previous encounters, this was an engagement with 'other' that occurred on the animals' terms and supported a consideration of their place in the world and the ways in which they make it. This encounter can be contextualised by Mum's reflection on having spent a lot of money on entertainment activities, and now that she felt that she had fulfilled this parenting obligation, they could move onto doing more 'ordinary' things. It is through 'ordinary' activities such as a walk that there is space for a self-expression, which there may be less of an opportunity for in encounters shaped by an intention to 'entertain'. These perhaps everyday small moments might seem rather ordinary and inconsequential but can be revalued as significant relational learning though a holistic lens. When given space, the self can express a deep human need to affiliate with wider life, and children can offer a reminder of this through their fresh eyes in exploring this world. This might be understood as an appreciation of our place in the whole that holds a potential to enhance its vitality, and this can be supported through learning to live with our children. Such shared experiences can revive a deep-seated human need that lives on within us despite a cultural attunement to growth, development and that which we can 'become'

Lucy's Mum 'Being Out with The Birds'

The following example demonstrates the influence exerted by children in ongoing family relations with their wider life context. In this, Mum refers to one of their favourite places to spend time in nature which is their local country park, and the reasons for this choice. Parks are highlighted as offering spaces in which an emphasis is placed on the preservation of ecosystems and can therefore offer greater potential for an encounter with the life these can support. This function of parks was particularly highlighted in this research through contrasts in experience demonstrated in family walks, as the Go-ProTM could be worn by children when walking through suburban environments on their way to

local parks. Suburban environments could be seen to inhibit the potential for an encounter with wider life in two ways: firstly, through depletion of the ecosystem supportive to wildlife, and secondly though families' potential freedom to move to enable a meaningful encounter with it. This combination of environments and behaviour can be considered in relation to the quality of 'wildness' and can be understood according to its definition as "a quality of interactive processing between organism and nature where the realities of base natures are met" (Cookson, 2011, p. 88). This quality can therefore be used to frame an understanding of better-preserved ecosystems that are supportive to 'wildlife' within them, but equally to humanity's 'base natures' and children's expression of this in their "spontaneity and instinctiveness" (Cookson, 2011, p 188). An intolerance of children's behaviours in public spaces is identified as contributing to a contemporary child and nature problem and forms part of the complexity of barriers within current conditions (Soga et al., 2018, White, 2012). However, this desire or need for an encounter with wider life or indeed 'wildlife' might be considered to live on and find expression in adult life too. This can be contemplated in relation to a reflection by Lucy's Mum on their visits to the country park, in which she identifies why they go there, and what is distinctive about this environment.

It's just a calming place. Lucy's going through a bit of a stroppy phase at the moment, so I find once we get out...and we get out there...and we're out with the birds – I do find we calm down. That's why I like going there. The other park is nice, but I don't find it so calming. I think it's because the birds are so prominent. I find it has a real calming effect on us. I don't find that when we go to the other park.

It is the presence of birds and hearing birdsong that is clearly identified here as inducing a calming effect and aligns with research highlighting birdsong as a common motivation or experience preference for park visitors (Driver *et al.*,1987, McDonald *et al.*, 1995). Birdsong is a sound recognized as significant to restorative experiences in nature (Ratcliffe *et al.*, 2013), and has given rise to the suggestion that in a "fast paced, multitasking society" that parks serve an important double function. This is both "as places to preserve ecosystems, as well as a place for humans to improve cognitive health" (Abbott *et al.*, 2016, p. 14). However, there may be a noteworthy quality in this use of the phrase "being out with the birds" that can be considered in relation to the magic consciousness structure and its' underpinning holistic vision. 'Being away' is a quality identified as

significant in attention restoration theory (Kaplan & Kaplan, 1989) and refers to a sense of freedom from life's responsibilities that allow one's attention to be restored. However, this holds within it a question about where we 'go to' that might be contemplated in relation to being "out with the birds" and our potential to attune "ourselves to the magical structure" (Johnson, 2019, loc. 1016). Magic consciousness highlights the significance of the hearing sense as described with reference to a 'labyrinthine ear' that encircles us back into a more harmonious state of belonging with surrounding life. This is a sense of a belonging supported through a shift in framing paradigm, away from an identification of the function of parks in service to environment and community, and towards a consideration of their fundamental interconnection. This observation may seem subtle but is exactly the issue highlighted as needing to be addressed through a paradigm shift. The description of magic consciousness as a 'silent intuition' highlights the challenge involved in capturing this in the experience of others. However, this research has focused on the potential offered by children to re-engage adults in such questions through their playful, exploratory relations. This will now be considered in connection with children's potential to lead adults through open spaces as expressed in the nature play motifs of 'maps and paths', 'adventures' and 'fantasy and imagination'.

6.4 Our Creative Capacities with Surroundings

'Maps and Paths', 'Adventures' and 'Fantasy and Imagination'

The expression of these play motifs can be contextualised by a research focus on family outings and use of a Go-ProTM that captured the child's perspective within this activity. The potential for 'adventures' can be understood as subject to questions of scale, and that it is young children's size that enables this within the immediacy of their local surroundings. Children's attraction to engaging with open spaces or undergrowth enabled their potential to negotiate pathways through it, and the Go-ProTM captured children's enthusiasm in their potential to do this. In the following examples, children drew adults into the activity of following paths, exploring as an adventure and using fantasy and imagination along the way. This demonstrated their excitement in having the chance to lead the way, and an experience of freedom in exploring the unknown. In each example, it is children's enthusiasm that dictates their role as leader, and adults fall into following

them whilst facilitating their access to these outdoor spaces. Although directions taken might involve some discussion between them, children led in this fluid, open-ended and creative engagement in 'carving out' a route. This activity can be considered in relation to the concept of 'wayfaring' (Ingold, 2000) which promotes understanding that knowledge of an environment is under continuous formation while moving about it as an embodied experience. 'Wayfaring' promotes understanding that such activity involves a mapping or storytelling process, as expressed in the sense that "we know as we go, before we go" (Ingold, 2000, p. 230). The footworn paths through woodlands might be considered to carry traces of this type of previous human or wildlife engagement, and an ecological perspective suggests that there may be a deep human need to be drawn into following these (Bainbridge, 2018). This has been described in the following way:

"Tracks are an ancient, magnetic language—pulling us in with possibility. The elusive poetry of a print, unlike the muscular certainty of a border line inked in an atlas, reveals details of a life being lived".

(Hoffman, 2013, p. 23).

Such paths have been suggested to "speak a mutable tongue" and "lend form to a fleeting world" (Hoffman, 2013, p. 22) and that by comparison "artificial borders bear little relationship" to this (Hoffman, 2013, p. 23). Adults might be considered as more strongly enculturated into reading environments according to their constructed functional logic, and this is something that children's embodied and imaginative languages can cut through with reminders of a scope for 'everyday adventures'.

Jack's Family Following Paths

Jack wore the Go-Pro™ accompanied by his dad and Nanna on a woodland walk during the preschool trip to the country park. Jack spots an opportunity to "go the little way" into the undergrowth and demonstrates an enthusiastic engagement with choosing paths and engaging imaginatively with what they might meet. This seemed to represent an example of shifting between matter and meaning which can include the imagined, and Dad seems to enjoy sharing a humorous engagement with this too.

Jack runs ahead "Let's go this way". He stops and looks around. "I go this way; you and Nanna go that way". Dad tries to follow him, and Jack sends him back the other way.

Jack: Dad, I can see something brown

Dad: ooh what can that be then?

Jack: I hear'd something Dad.

Dad: Was it an elephant?

Jack: No (he laughs). It's nothing. (He sets off down a new path again). Let's go

all the way round here...it's getting darker at this bit.

Dad: Yeah, it's all the trees.

Jack: Dad, I can see things (with excitement)

Dad: What?

Jack: The sea!

Dad: The sea? (laughs)

Jack: Yeah (he's smiling)

Dad: You can see the sea? From 'town name'? (The town is inland. Dad and Nan

laugh good naturedly and Jack joins in).

Jack: There's Sea there.

Dad: Ok

Jack seems conscious that this is an imaginative engagement and laughs along with Dad's suggestion that there might be an elephant in the woods. Despite this consciousness, this does not stop Jack in continuing to engage with imagined possibility and laughing at the fact that this is not in fact true. Such activity might be considered as the way in which children and adults can engage in imaginative activity together, through a playfulness in which there is open acknowledgement of the amusement that it evokes. This might offer an adult window into the realm of children's imaginative engagement, which perhaps always involves a willing suspension of the real in order to enjoy the possible. Dad's reflections involved a comparison between this piece of footage, and another recorded on a visit to a local petting farm, and the types of experiences engendered by each environment. The following is an excerpt from our reflective conversation:

Dad: Watching the one from the woods has got me thinking that we should try and do – encourage the imagination more...I just think it's good to encourage their imagination really. It's all part of being creative, I guess.

Me: How is that as a reflective experience for you?

Dad: It's good. You're always trying to do the right thing for the kids, trying to bring them up right, but often feeling like I've failed. Like this morning when they're difficult before school. You feel like you've done everything right and yet they're difficult.

The sensory elicitation interview seemed to offer Dad an opportunity to reflect on the qualities of fleeting moments in their busy daily lives. Through this to appreciate the value these can hold, and to identify a significance in their imaginative activity in the woods. The content of this conversation reflects the wider cultural context of "multiple opportunity and orientation related factors" (Soga *et al.*, 2018, p. 114) situating families within timetabling pressures that challenge them in going outside to play. This can also indicate a contemporary consciousness about parenting heavily weighted with concerns about children's futurity which can give rise to a daunting sense of adult responsibility to "do the right thing". If nothing else, this footage offers the potential to appreciate the simple experiences that they do share and enjoy together. Within this, perhaps also the value within moments of "a liminal substance" to which both children and adults can respond with an "ambiguous "yes"" (Johnson, 2019, loc. 987).

Sam's Everyday Adventures in Choosing Paths

Sam's use of the Go-ProTM on the pre-school trip to the local historical site offers another example of a creative engagement with surroundings. This aligned with the nature play motif of 'Adventures' which is described as when "you don't know what's going to happen when you start out" (Sobel, 2008, loc. 327). The footage illustrates Sam actively engaging with the Go-ProTM which he holds and looks through and makes this a more conscious engagement with the camera in this interaction with place. His enjoyment in making choices and exploring is demonstrated in the following short interchange:

Sam and his Mum are walking together along a path and arrive at a signpost.

Sam: "Mummy, we don't know where goes where".

Mum talks about what's on the signpost, and Sam chooses a direction.

Sam: "This is an amazing place.... Mummy – what do you expect to be down that path?" (As they reach a new path)

Sam: "Mummy, I would love her to see this...err filming"

Mum: "Yes, she can see all that you see"

Sam: "Yes, she'll love it. Totally love it... Mummy, this adventure is amazing. I

didn't know they wanted us to have an adventure.

This excerpt illustrates a sense of 'everyday adventures' that are child-led and essentially at a child scale (Ball *et al.*, 2012, Gill, 2012). The play motif of 'maps and paths' has been described as "finding shortcuts, figuring what's around the next bend" and represents "an inborn desire to explore local geographies" (Sobel, 2008, loc. 515). This footage highlights a sense of this for Sam and demonstrates that a rather mundane engagement with space for an adult can offer children the potential for an 'adventure'. It is this contrast in adult and child scale, experience and perception, that allows children to play out these quite archetypal and fundamental themes in every-day ways. Mum's reflection when watching the footage was as follows:

It's definitely an accurate reflection of how he explores places. He likes, as he had there, free reign to choose what path he goes down and what buildings to go in and when. He loves an adventure, so that's generally how we treat things, especially if we're going somewhere new – then that makes him excited about going there.

As an only child Sam and his Mum take a lot of outings on their own together, and this comment suggests that for them 'adventuring' has become something of a joint activity. Mum later additionally comments.

We go out with friends, but we also go out just me and him a lot. We don't feel we have to be with others to go out and do things. We went to visit a castle yesterday and had a lovely time – it doesn't bother us.

Mum talked about the range of nearby places that they visit regularly and described her reasons as being "it's something to do, it's getting out the house, its fresh air, it's just nice to go somewhere different or new". In this respect, it might be considered that there is an element of adventuring involved for both, and that through this joint activity Mum enjoys

sharing with her child the process of "figuring what's around the next bend" (Sobel, 2008, loc. 515). Mum concluded with a reflection on the place they might choose to go to spend time in nature, and the description highlights the appeal for them both in leaving the path and having an encounter with wider life.

We love a woodland. We love nothing more than a woodland walk Sam and I. We went off the main path yesterday and saw a squirrel quite close-up. It sat and stared at us for a long time. Sam made lots of comments about what he was seeing. There were lots of beautiful flowers around. He was wondering something about the flowers coming up, and if we were going to see the squirrel again on the tree ahead...

This comment highlights the influence of Sam within daily family life, and the opportunities for experiential moments that this can promote. These can be moments in which a pleasure is shared in contemplating the life that surrounds us. Magic consciousness highlights our human creative capacity in forming relations, and this has illuminated the potential for shared encounters with children to offer a source of revival. Our felt sense that children need contact with nature may be considered expressive of a deep parallel need in the adults that now accompany them. The potential for a renewal of our relations can be understood from a holistic perspective as relevant to the whole context of child, family, community, nature, culture, society and its interconnections. Children can offer everyday reminders within fleeting moments of activity of our human capacity for forging new paths and for remaking relations. The potential for this to have impact rests on revaluing the "all-quickening, creative power of child-life" and allowing this to be "translated from their life to ours" (Froebel, 1887, p. 89). For me, this has been through hearing an observation that "magic comes right up from our hearts" and feeling a truth within its reminder of a human capacity for building our relations with care.

The nature play motifs highlighted through considering magic consciousness can align with Froebel's description of children's 'creative' play, and this can be understood as that in which "the material used is the only limiting factor" (Liebschner, 1992, p. 53). This description can be considered in connection with more recent definitions of play, and the role that this occupies in our human activity. Play has been described as

"a free activity standing quite consciously outside "ordinary" life as being "not meant", but at the same time absorbing the player intensely and utterly. It is an activity connected with no material interest, and no profit can be gained by it".

(Huizinga, 1955, p. 13).

This consideration of play is associated with "an expression of human freedom" that is "distinct from ordinary life" and essentially presents an "intermezzo, an interlude in our daily lives" (Huizinga, 1955, p. 13). Essentially play takes place "outside and above the necessities and seriousness of everyday life" (Huizinga, 1955, p. 13), and therefore perhaps such disruption can be considered to offer a value to the 'responsible' adults that now accompany children in this. By contrast with responsibility, play can offer the opportunity for self-expression and is therefore characterised by an effortlessness that can disrupt our exertions in becoming with the potential for being. Present conditions that position adults in joining children in outdoor play may offer opportunities to break with business-as-usual, through an interlude in which to listen to the self, to the other, and their potential for an interconnection.

6.5 Summary

Magic consciousness has drawn attention to the 'everyday adventures' and 'ordinary magic' of young children's play, and the fact that these experiences can be shared with the adults that now accompany children. Use of a holistic vocabulary can highlight these playful engagements as valuable reminders of our human creative potential, and that through this we can choose how we form our relations with all aspects of wider life. Children's imaginative activity and big questions can cut through an adult enculturation, and with a holistic framing, offer the potential for adults to have their perceptions refreshed. Consideration of these two non-verbal archaic and magic consciousness forms will now be joined by the mythic consciousness structure. Within this consideration turns to the function of human language and symbol and the role this can play in forming our relations with surrounding life.

7 Mythic Consciousness

7.1 Introduction

The mythic consciousness structure introduces the use of language and symbol however this is imbued with feeling and relational purpose rather than abstraction and rational function (Gebser, 1949). It is a language that can be shared within families between parents or guardians and their children, in the stories, songs and rhymes that they engage with. This research has explored the lens offered by this consciousness structure in families' relations beyond the home and illuminated its role in mediating these. Within this, there has been the demonstration of different needs and motivations brought by children and adults, and thereby the influential opportunity in shared experiences.

7.2 What is Mythic Consciousness?

The mythic structure represents a more familiar form of consciousness due to its use of language and symbol. This consciousness structure "gives voice to the powers of empathy, sympathy and associative thinking that magic consciousness makes possible and communicates a collective sense of "ours" and "us"" (Gebser, 1985, p. 65, in Chawla, loc. 2658). The words myth and mouth are linked to the Sanskrit word 'mu' which means "to sound" and expresses an understanding that the sound of the mouth reveals emotion. The essential characteristic of mythic consciousness is "the emergent awareness of soul" (Johnson, 2019, loc. 1059), and this gives consciousness access to an internal life of sensibility and imagination. The use of language here is in story, song and rhyme, as the expression of "associative, metaphorical thinking that is known through the voice" (Chawla, 2002, loc. 2743). Such activity represents a circling pattern of "a world half created, half received" (Chawla, 2002, loc. 2743) and gives expression to the complementarities of "the microcosm and macrocosm in the individual soul and the world soul" (Johnson, 2019, loc. 1055). The circling pattern orients to cyclic time as expressed through the in and out breath, heartbeat, seasons, day and night and generations. It orients to a diurnal world of "complimentary and not yet contradictory opposites" (Johnson, 2019, loc. 1081), such as child and parent, light and dark, earth and sky and spring and autumn. This is therefore the use of language and symbol to support relations with other

inclusive of people, place and all other life, and links thereby with magic consciousness as a foundational experience.

7.2.1 Mythic Consciousness as a Language of Relationality

7.2.1.1 The Cyclic Time Relations of Family Life

Mythic Consciousness can be considered as one aspect of an individual's relations with a whole context and has drawn attention to family engagement with their locality across the cycling patterns of time in days, moments and lifespans. The independent use of Go-ProsTM demonstrated local engagement alongside pre-school trips, and thereby a more holistic picture of each families' life. This footage offered insight into places families chose to 'spend time in nature', and how this was influenced by time of day, days of week, school terms and seasons. Such choices were demonstrated as influencing the nature of activity, who was present and can be considered in relation to the routines and rituals that can structure family life. Routines are characterized by "engagement in cyclical activities that follow similar patterns of behavior" (Howe, 2002, in Izenstark and Ebata, 2016, p. 143) but may lack the "symbolic meaning and anticipatory nature of family rituals" (Izenstark and Ebata, 2016, p. 144). Rituals can develop in relation to any aspect of family life, be unique to their identity, culture and shared values and become interwoven with routines over time (Bossard & Boll, 1950, Spagnola & Fiese, 2007). Footage captured over the year demonstrated seasonal changes and their potential links to intergenerational cycles carried forth as traditions over time. The pre-school service can support daily family routines, and activities such as family trips can offer an opportunity to create rituals supporting connection between community and environment. The independent Go-ProTM use illustrated family rituals involving places and activity, and mythic consciousness drew attention to the ways families drew upon familiar stories in forming relations with wider life.

7.2.1.2 The Cyclic Place Relations of Family Life

The ethnographic place of this research was illuminated according an 'entanglement' of all life moving through it. Family use of the Go-ProTM highlighted how perception, knowing, memory and imagination form part of these relations and permeate the family and wider context. Mythic consciousness describes a human capacity to 'story' relations that are received through the body and responded to in multi-dimensional ways. One of the ways this can operate is in the creation of significant landscapes as the "intimately known everyday places that define local identity for residents" (Chawla, 2002, loc. 2745). This process has been described in the following terms:

"Knowledge of places is ...closely linked to knowledge of the self, one's own position in the larger scheme of things, including one's own community, and to securing a confident sense of who one is as a person".

(Witt, 2017, p. 60)

This description highlights the fundamental interconnection between self and a sense of 'other' in surrounding relations and the significance of a holistic perspective in considering their constitution. Mythic consciousness represents a use of language with empathy, sympathy and associative thinking, and might be considered as a means by which families can build "stories of placefulness" (Witt, 2017, p. 60). This is presented as the goal of an educational approach described as 'Storying the Outdoors' which offers a means to "nourish habits such as noticing, listening, touching and feeling that children may need to build a kinship with the outdoor places" (Witt, 2017, p. 69). However, the Go-ProTM footage highlighted ways in which families can do this instinctively in their local interactions and highlights the significance of considering educational contexts in inclusive, holistic terms. This involves shifting emphasis away from discrete activities, and re-orienting to the potential support in connections between child, family, community, nature, culture and society.

The family walks captured by Go-Pro[™] were often demonstrated as circular, through leaving and returning to home or another given location. The footage demonstrated that the circular nature of walks can enable processes of exploration, engagement, connection

and response, and these are highlighted as key within the practice of 'storying the outdoors' and building connection to place (Witt, 2017). Families demonstrated that they drew on familiar stories from home in this process, and these stories centred around key themes of personal freedom and restriction, the familiar and unfamiliar and a sense of fear or trust. The child-worn Go-ProsTM offered intimate insight into the interactional processes through which these relations between families and surroundings occurred but attended to the child's relations at their centre. The body-worn Go-ProTM offered the means to engage with the embodied and emplaced nature of this process. A sense of this could be shared with adults in its intimate capturing of the rhythms of children's limbs, breath and energies and as expressed through their movement, hunger and thirst. The capacity of the camera to record 'a trace through' of these sensations illuminated the ways in which these sensorial experiences occurred in concert with their exploratory and imaginative engagements with place. The cyclic patterns of outings demonstrated the potential for shift within them, often from adult-led activity at the outset to stronger childled engagement as trips progressed. This insight echoes my prior observation of the potential for children to influence adults in natural environments (Watts, 2017), along with an example of home-schooled children whose visits to 'wild' spaces were found to influence adults' pedagogy over time (White, 2014). Adults may lead an engagement with place according to their planned intentions, but once there, influence from the environment and children can start to reshape activity and attention.

7.3 Child and Adult-Led Outdoor Storying

7.3.1 The Complimentary Opposites of Adult and Child

Extracts from footage will be shared that illustrate the ways in which families drew on familiar stories from home in making connections with the life they encountered in surroundings. The nature of these interactions could be partly differentiated by whether child or adult led, and insight into this arose through linking examples from data with relevant literature. A distinction could be discerned in the thematic content of child and adult-led story referencing, and the nature of connections made across the whole context through this process. The examples shared in this chapter seek to illustrate this distinction and are drawn from Go-ProTM footage gathered both on pre-school trips and family outings and are accompanied by relevant parent reflection where available. These

findings will illustrate examples of child-led, adult-led and shared family storying, and the potential role fulfilled by pre-school story-telling activity on trips to natural environments.

7.3.2 Child-led Outdoor Storying

Liam's Search for The Big Bad Wolf

Liam attended the pre-school trip with his Mum and Dad, and the footage demonstrates him setting off with them across the field to explore the grounds. Liam narrates his thoughts stating:

I'm gonna find a big bad wolf. I'm gonna turn him into a rabbit.... Look, that's the big bad wolf's house (he points to an old shed at the edge of the field). Look, Peter Rabbit holes.

The family walk through undergrowth into the next field largely covered by nettles and uneven grassland, and on assessing the space Mum and Dad spot an outbuilding and suggest they search it for spiders. Liam engages with this activity for a short time but after a while states "I don't wanna see the spiders...I wanna find the Big Bad Wolf". Mum responds that "He might be sleeping though" and suggests "Shall we look around here". Despite the attempt by Mum to manage Liam's engagement with a nettle-filled field, Liam indicates a strong inner drive to engage in imaginative, storied relations with this place. In the sensory elicitation interview Mum demonstrates her insight into the significance of this for Liam, and the following represents an extract of our reflection on the footage.

Mum: (whilst observing the footage of Liam's engagement with the environment) "He loves Peter Rabbit...those are rabbit holes, aren't they?"

Once we have watched the footage, we engage in some reflections on what has been seen:

Mum: I think he's thinking "Is something going to jump out?" because he said about the Big Bad Wolf.

Me: So, do you think he thought that there might be a Big Bad Wolf?

Mum: Yeah, I think he thought...because he watches The Three Little Pigs and it's got a Big Bad Wolf in it...maybe he was thinking about that one.

Me: So then, when he's out in the world he thinks that what he watches in cartoons might be...

Mum: Yeah, he might.

Me: It's amazing to think that actually...

Mum: Yeah, cause when I said that the wolf might be sleeping, he was like "No" as if he was going to see him.

Me: Do you think he felt a bit scared?

Mum: Yeah, slightly. A little bit nervous maybe...

Me: He looked for you for reassurance too in the footage...he is looking for the

Big Bad Wolf, is he?

Mum: Yeah, you can see him looking about.

Me: So, is it partly a game and partly he wants to see the Big Bad Wolf?

Mum: It's a "and what if I did?". You can tell by the tone of his voice. Hmmm...is anything going to jump out? Now he seems braver...

Mum demonstrates the degree to which she is in tune with Liam's emotions, and aware of the nature of his imaginative engagement with the Big Bad Wolf. Mum accommodates Liam's state of seeming fusion between physical and imagined surroundings and illustrates that although this is illusory from an adult perspective, that this does "represent a real world of feelings" (Chawla, 2002, loc. 2750) for Liam. Their joint engagement with the lexicon of this familiar story from home illustrates how it "gives voice to the powers of empathy, sympathy and associative thinking" (Gebser, 1949, p. 65) in their experience of surroundings, and that for Liam this involves the potential for fear.

7.3.3 The Role of Fairy Tales for Children

Fairy tales offer a medium highly suited to young children's development through use of simple images that can aid in dealing with "complex and ambivalent feelings" (Bettelheim, 1976, p. 74). However, there can be a lack of insight by adults into the value of this for children, as described in the following way:

""True" stories about the "real" world may provide some interesting and often useful information. But the way these stories unfold is as alien to the way that the prepubertal child's mind functions as the supernatural events of the fairy tale are to the way the mature intellect comprehends the world."

(Bettelheim, 1976, p. 53).

Children bring order to their world through their use of opposites, and fairy tales can meet this need through motifs such as good and evil. A contrast in perspectives can be demonstrated in adult conceptions of children's emotional needs and expressed as an impulse to present the world as inherently good in order for children to feel safe. However, a psycho-analytic perspective highlights that a child should not be diverted from his anxieties and fears, but instead be allowed to acknowledge the inner conflicts that originate in primitive drives and violent emotions (Bettelheim, 1976, Warner, 2014). The important experience for children resides in their potential to feel that such difficulties can be met and overcome, and fairy tales can offer an important growth experience for children in "bridging the immense gap between inner experiences and the real world" (Bettelheim, 1976, p. 66). The Big Bad Wolf is understood to represent the "devouring powers against which one must learn to protect oneself, and which one can defeat through the strength of one's ego" (Bettelheim, 1976, p. 42). The child can recognize this within themselves as well as hold anxieties about meeting this in another. The wolf can offer an externalisation of this, and the story tells how this can be dealt with constructively, with a feeling of fairness satisfied by punishment of the wolf that is convincing to the child because it "conforms to the way a child thinks and experiences the world" (Bettelheim, 1976, p. 44).

Liam's Family Trip to 'The Bear Hunt'

The independent use of the Go-Pro™ by this family illuminated the way Liam brings the idea of the Big Bad Wolf with him in his engagements with outdoor natural spaces on different occasions. This is demonstrated in the family visit to the 'Bear Hunt' in which the Big Bad Wolf forms part of this families' ritual engagement with this space. Liam, Ava and their Mum reveal their familiarity with this place and their imaginative relations

as they arrive at the park. Ava informs me "We always go on a bear hunt", and as we approach the wooded dip Mum asks "what are we looking for today? A bear? A wolf?" to which Liam replies "um, a wolf". Rituals are described according to their symbolic meaning and anticipatory nature (Fiese et al., 2002), can arise in relation to any aspect of family life (Bossard & Boll, 1950), and be unique in reflecting their identity, culture and shared values (Spagnola & Fiese, 2007). The suggestion that family routines and rituals become interwoven can frame consideration of these after-school trips to the park, which through the children's repeated insistence have become imbued with symbolic meaning through their imaginative engagement. Their interactions and built familiarity with this location's paths, clearings, trees, long grass, holes, plants and spider's webs have become a site through and in which they explore themes of fear and trust. As we enter the dip Ava says to me "You have to go in there...if you want to walk...there might be a little bit stingy nettles so be careful, ok?". This is a place that is felt to be safe but holds flexibility for the unknown too, and this is what is played out by the children when they "treat it as somewhere new every time" as Mum describes. Mum demonstrates her identification of the value in supporting this activity in her refection that it "makes their minds more open to the world and gives them good imagination". The role that this plays in the life of the child is illuminated by Liam bringing this with him on the preschool trip, as part of a lexicon of outdoor storied language that he shares with his family. Liam seemingly plays with the potential for a Big Bad Wolf and the support of his parents in a way that illustrates a diurnal world of good and bad, fear and safety and parent and child. This activity demonstrates a process through which Liam confirms a sense of "ours" and "us" within the family (Gebser, 1949), through experience in unfamiliar surroundings and the potential for building trust.

Tom and Dad's Game of Avengers

Tom and his family also demonstrated drawing upon a shared lexicon of stories in their interactions with place and each other. These examples were taken during the families' independent use of the Go-ProTM during walking trips to, in and around local parks and green spaces. The storying here was largely child-led, but the footage evidenced Dad laughing in enjoyment at children's ideas and participating in their imaginative play. The following is an extract of dialogue captured in Go-ProTM footage during a family visit to their local park. Dad and Tom have just left the play area and Dad sits tiredly on a park

bench while Tom still wants to play. Dad is wearing a Deadpool T-shirt which seemingly demonstrates his own interest in superhero culture, and this adds some additional context to the interactions observed. Tom is standing and wants to keep moving within the open space of the parkland, and Dad continues their game but while sitting and having a rest.

Dad: We was playing Avengers, wasn't we?

Tom: Can I be villains?

Dad: You wanna be the villain? (laughs)

Tom: Yeah

Dad: What villain are you gonna be?

Tom: I'm gonna be the Ice Queen.

Dad: Ice Queen? (Dad laughs a lot at this).

Tom: Yeah, in Frozen.

(Dad pretends to freeze)

Tom: Shhhh. You're frozen.

(Dad pretends to freeze again)

Tom: Say Brrrrrrr.

Dad: Brrrrrrr.

Tom: ...and Hot!

Dad: Thanks

Tom...and Cold!

Dad: Who am I?

Tom: How about youuuuur.... Avenger?

Dad: Which one?

Tom: I'm spiderman...I'm hot spiderman.

Dad: hot spiderman? (laughs)

Tom: You're Red Hulk Smash.

Dad: Red Hulk Smash.

Tom: Give it Red Hulk Smash. (Dad does a Hulk impression). Fire! You're on

fire!

Dad: Oh no – that's too hot? (He shrugs!).

Dad then turns their play into a different game by holding out his hand to Tom and saying, "Can you hold this for me?". This is seemingly a game of tricking each other, and Tom reciprocates the same action towards Dad.

In this footage, Tom led the game though an engagement with superpowers, and their potential for a magical, transformative effect on the other. The hero character is described as having "a body which can perform miraculous deeds" (Bettelheim, 1976, p. 57) and that identification with this can compensate in fantasy for human limitations. The superhero role enables a satisfaction of "grandiose desires", and for the individual to "be more at peace with this body as it is in reality" (Bettelheim, 1976, p. 57). The appeal of this theme can be considered as playing out across the whole context of this ethnographic place, through the mass media with which the family engages, and Dad's ongoing interest demonstrated in the wearing of a Deadpool T-shirt.

Superhero stories represent the evolution of the fairy tale and myths and legends genre, and as an extension of the potential to engage with the hero character (Zipes, 2009). Such stories can offer children the potential to bring order to their world through the clear structure of hero and villain and resolution through a satisfactory conclusion. A child can identify with a hero and engage imaginatively with their struggles and victories, and this can serve to acknowledge their primitive drives rather than be isolated by their feelings. The potential to engage with understanding life through story represents a continuing human need, and Zipes (2009) asserts that "reason matters, but fantasy matters more" (Zipes, 2009, p. 77). Such a process can be seen to continue within:

"Diverse modes of the fantastic employed by writers and artists to induce effects intended to create difference and reveal the extraordinary in the ordinary".

Tom's family offers examples of the ways in which this can be expressed through child and parent interactions in local spaces that can enable children's potential to move freely and play.

Tom Runs like the Gingerbread Man

An exploration of our human capacities is further illuminated in this family's trip to a Lake in which a transition is demonstrated between suburban space with a busy road and green space where children's freedom to move is enabled. The following extract is taken from this point of transition as the family go through the gate, and Tom identifies that he is away from the road and can now start to run.

Tom: Run, run, run as fast as I can, you can't catch me I'm the gingerbread man (he speaks in a 'gingerbread man voice'). You can't catch me! You can't catch me!

Dad: (his voice is heard as he is walking along behind him) I can't catch you. (Tom laughs excitedly as he continues running, and his sister over-takes him).

Sara: You can't catch me.

Tom: Yes, I can (his sister runs ahead. Tom stops and turns back towards Dad who is pushing the buggy along the path behind them) I need your speed. (He starts to walk back towards Dad) I need your speed.

Dad: You need speed?

Tom: Yeah

Dad: Ready? (He holds out his hand to him, they touch hands) 'Pzzzhhhhhhhhh-Go!' (Tom starts to run, then stops and turns around again).

Sara: You can't catch me! (She is flapping her arms as she runs like wings)

Tom: Yes, I can – I got speed! (He then stops and turns back) Bit more speed Dad.

Dad: (Holds out his hand and zaps from a distance) Pzzzzhhhhhh. Go!

Tom is making lots of noises that indicate the effort that his running is demanding:

Hi...hi...hi. (He stops and turns to Dad again) A bit more?

Dad calls out: Pzzzzzzhhhhhh- Go!

(Tom is really panting hard now as he runs and is getting out of breath)

Tom: Here I come, Here I come Sara! (As he gets closer to Sara) Here I come, here I come, here I come... (Sara is slowing down, but she runs again in response to her brother). Sara, Sara – I need your speed! (Sara walks back to him and touches his hand) Pzzzhhhhh!

Tom then turns their running into a game of tag, but as Sara is older, she soon puts distance between them, and runs away from him along the path.

Tom seemingly draws upon the familiar language of this story in expressing his enjoyment at being able to run, and this turns into play around the potential for the children to escape and therefore have individual freedom. The significance of the language can be considered in terms of the historicity of fairy tales as rooted in pre-literate

society. The narrative elements of such stories are emergent out of spoken word, and there is a "profound respect in the genre for what words do in the world, as well as in the stories" (Warner, 2014, p. 41). The power of language gives rise to use of repetition and rhyme which belongs to the same verbal patterning as counting, skipping songs, and nursery rhymes. These language forms hold cultural associations with children and to which they demonstrate an ongoing interest and affinity. Such processes operate in the following way:

"Patterns of repetition widen out from the brief rhymes and charms into whole structures of incident, with internal architecture reprising a similar episode again and again".

(Warner, 2014, p. 42)

This description aligns with a mythic use of language understood as "associative, metaphorical thinking that is known through the voice" (Chawla, 2002, loc. 2743). The repetitive, rhythmic form of both story and language operate in circling patterns, and this is understood in terms of a human capacity for relations in a world created and received. In this instance Tom draws on this repetitive phrase from the story to describe the rhythmic movements of his body during this circular walk around the lake, through which the family forms relations with an area that they then describe as lovely.

The Gingerbread Man story features a theme of escape that is common in fairy tales and gives rise to moral questions around whether the Gingerbread man is 'naughty' for running away. This theme is balanced by his expression of bravado in evading those who try to possess him but highlights the potential risks associated with freedom demonstrated by the Gingerbread Man's eventual demise at the greater intelligence of the wolf (Bennett and Stoski, 2019). The Go-ProTM footage captures Tom's play with ideas of escape and 'naughtiness' within the safe context of his family but contextualised by them being away from home where there is a theoretical potential for him to run away. Exposure to this storying is brought into the children's play and expressed here in relation to surroundings that enable a sense of freedom through open space. As Dad and children play this together, it holds scope for creating a 'we-feeling' in the family as they engage with surroundings as nature-based family activity (Izenstark and Ebata, 2016). This effect can also be

considered in relation to a description of mythic consciousness as communicating a collective sense of "ours" and "us" (Gebser, 1985, p. 65, in Chawla, loc. 2658). The game segues seamlessly into the families' play with superhero powers as a fantasy engagement with one's powers in relation to another. The way in which all family members switch between running away and mutually supportive play creates the potential for a positive experience of family relations played out in the wider context of nature and community. The footage later demonstrates Tom initiating conversation with people they meet, an interest in eating berries and wanting to interact with birds on the lake. These actions might be considered to demonstrate Tom's positive orientation to the other that he meets in the world.

In reflecting on footage, Dad described the location of their home as being "the centre of the universe here" as "we've got everything that we want". This was contextualised by discussion around their move from the outskirts of London which he had lived in for thirty years and "just watched it change". Dad described their present location as lovely as they live in walking distance of a lake and the supermarket which could meet their needs with four young children. The area that Dad described is slightly outside of the pre-school locality which they drive their children to, and his description highlights both the significance of accessible spaces in walking distance for young families, and the experience of relative difference across degrees of urbanisation. The family also now live closer to grandparents, and this illuminates the significance of social and environmental relations within the context of the child in the family, community, nature, culture and society. These insights can again highlight the benefit of a holistic perspective through which individuals are considered in connection with surroundings through multi-levelled relational layers. Such a lens can be brought to this family's interactions with their locality and illuminates a context of environmental and time challenges but with enough positive connections to support the family unit. The Go-Pro[™] footage engages with the child's perspective at the centre of this whole context and illustrates enduring themes that a child plays out in relations with their world. These are fundamental issues of agency, freedom for self-expression and the development of the potential for fear or trust in their relations with the world.

7.3.4 Theoretical Insight into Child-led Outdoor Storying

Go-ProTM footage can demonstrate children's use of storying in their experiences of the world and offers a means to illuminate this for adult viewers. It is suggested that for a child, fairy tales

"Bring some order to the chaos of his mind so that he can understand himself better – a necessary preliminary for achieving some congruence between his perceptions and the external world".

(Bettelheim, 1976, p. 53).

This perspective aligns with a Froebelian identification of the significance in childhood of establishing relations between self and world in which it is possible "to find the unity that connects them" (Froebel, 1887, p. 50). It illustrates the suggestion that fairy tales can tell children what they most need to know, and "that permitting one's fantasy to take hold of oneself for a while is not detrimental, provided one does not remain permanently caught up in it" (Bettelheim, 1976, p. 63). From a psycho-analytic perspective, the language of fairy tales offers children a means to externalize inner processes in controllable ways. These can be expressed in child-friendly terms for contradictory tendencies, such as "fears in a voracious wolf" or "wishful thinking on a good fairy" (Bettelheim, 1976, p. 66). Such means enable relations with the world that accommodate inner life, and if omitted may lead an individual to "never feel fully satisfied in the world because, alienated from the unconscious processes, he cannot use them to enrich his life in reality" (Bettelheim, 1976, p. 65). Although mythic language may be judged 'childish' and thereby hold lower status, a holistic perspective highlights its significant purpose in our relations with surroundings. Although such stories might be considered relevant to childhood when more imaginatively predisposed, the significance of the themes that run through them should not be diminished through a loss of adult insight. Froebel's message can guide adults to revalue the relational layers formed with surroundings, some of which have been subsumed and lost to awareness through re-orientations over time. Our present rationally created conditions and cultural 'stories' suggest that there is something relationally amiss to be addressed (Haraway, 2016), and a holistic perspective calls for a reintegration both of children's agency and the relational languages that they can express.

The moments of shared adult and child experience captured in this research highlight a scope for change within the conditions of our 'ordinary' daily lives. Shared experiences with children can prompt our re-connection with wider life, an engagement with play and to share in a form of storying that strengthens a capacity for empathic relations with our surroundings.

Aisha's Wish for Paradise

Mythic consciousness is expressed through language and symbol and in this way can be considered broadly accessible. The following example offers a different way of considering influential child-led storied relations with outdoor environments, and that is through children's experience mediated by engagement in symbolic representation. The child-led storying conveyed here was shared by Mum in reflecting on living in a block of flats in which her children's behaviour was not well-tolerated by neighbours. This meant that she felt compelled to take children on outings so they could play, and the following comments occurred in discussing the places her children like to visit, alongside their activity at home. These reflections highlight the multi-layered nature of this whole context and influential processes within it and can be considered according to the ongoing interplay of perception, knowing and imagination.

Mum: My daughter's telling me she wants to go to paradise – so I'm looking up a holiday now. Paradise is palm trees, sun, blue sea...every time she sees it, she says it. It's from 'Hotel Transylvania'... I don't know where... She saw it the other day on a drink bottle, and any time she sees sun and blue sky she says, "Look Mum, its paradise". Ah – I feel like crying. Now I've got to save up for paradise. I'm gonna have to find a way to get us to go by train to a beach with sun. I'm looking up prices so I can start saving for paradise. Somewhere with a beach so she can see it.

Me ...and who wouldn't want to go to paradise?

Mum: So, they are coming out with their own things now. I ask them where they want to go...the farm, pick them up from school with scooters...

Aisha's reference to paradise is drawn from a contemporary form of storying popular with children in animations, but the language reflects archetypal themes. Paradise can be understood as an "idyllic place or state" (Oxford English Dictionaries, 2020), and a young

child's reference to this can seemingly be powerful. This was evidenced in Mum's

motivation to experience such a beach with her children, and I too felt the enchanting

effect of this word in our conversation. This reference cuts through the ordinariness of

day-to-day family routines, with the potential for the extraordinary that life can offer too.

Children can draw attention to this through their fresh eyes, lack of guile and orientation

to a storied world. The appeal of paradise might be considered equally impactful in adult

life and creates the hunger for escape offered by a holiday. Aisha's reference here

highlights the significance of the environmental qualities offered by an 'entanglement' of

warmth, beauty and sense of freedom within a place. Here it is a child's engagement with

this story that drives an adult motivation to engage in such environmental relations. This

incidence can be considered in terms of a mythic consciousness, and also according to

the ways that perception feeds knowing, memory and imagination (Pink, 2009). The child

during this process can be valued for the freshness and vigour they bring, and the potential

if we allow it, for its translation from their life to ours.

7.4 Adult-Led Outdoor Storying

Noah and his Mum meet Peter Rabbit's Friends

Outdoor storied relations could also be led by adults in seeking to build connections

between home and wider context, and through this, empathic relations. The following

extract is taken from footage captured when Noah and his Family were walking along the

woodland footpath at the park, and Noah saw squirrels moving in the undergrowth.

Noah: Look!

Mum: What is it? What can you see? We saw something running, didn't we?

Come and see it (They start to walk through the undergrowth together get a closer

look. As they get near Mum points at them with the stick-wand that Noah had

previously been playing with).

Mum: Look, its Peter Rabbit's friends the squirrels, but Peter Rabbit's friend's a

red one – they're grey ones. Can you see? Want to get closer?

Noah: Yeah

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Mum: Come on then, we've got to be quiet though or they might run away (they walk further into the woods).

Noah (says quietly): Peter Rabbit's friends.

Mum: Here you are – they're jumping. Can you see them jumping?

Noah: (in a quiet voice) I wanna go close.

Mum: Ok - if we get too close, they might run away. (Mum then narrates the

squirrel's movements). What do you think they're eating?

Noah: Nuts

Mum: That's right, nuts...and seeds.

Noah: Peter Rabbit's friends!

Mum: Ooh, they're nice aren't they

Noah: Where's Peter Rabbit?

Mum: He's probably hiding – probably having breakfast with his Mummy, under

a tree somewhere, in a burrow. (And they turn and start to walk back).

This might be considered an example of a parent 'living with' their child and enjoying the process of sharing in their experience of the world. Mum joins Noah in his storied relations and describes the world to him in these terms. Through this she builds on their shared embodied and emplaced experiences and relates these to their own as a family. Within this, Mum prompts Noah to engage in building his 'knowledge of the world', but it is his imaginative consideration of relations that engages his interest most fully. It is suggested that "the child intuitively comprehends that although these stories are unreal, they are not untrue" (Bettelheim, 1976, p. 73), and thereby illuminates a natural propensity to engage in imaginative thinking but with a consciousness of this as a mode of 'being'. This use of story referencing however might be considered in terms of the suggestion that "many parents believe that only conscious reality or pleasant and wishfulfilling images should be presented to the child" (Bettelheim, 1976, p. 7). Story characters are presented as 'friends' to promote a positive impression of the world to a child in need of protection from its potential for harm. It may be instinctively understood as 'good' parenting to protect young children's innocence, and counter-intuitive to reference fearful story characters. This however is a belief that can be understood as culturally embedded and evidenced in a history of children's stories that have changed over time (Bettelheim, 1976, Zipes, 2009).

A shift in children's stories can be considered to express an adult misconception of children's storied needs. It is asserted that "contrary to what takes place in many modern children's stories" there is a deeper need that is acknowledged in traditional fairy tales in which "evil is as omnipresent as virtue" (Bettelheim, 1976, p. 8). Adults can be considered as more strongly conditioned by a mental consciousness structure embedded in a surrounding culture (Chawla, 2002). Within this adult agency is dominant, and children's voice can be dismissed as less sophisticated or relevant. However, Children's innocence is accompanied by a lack of preconception, and this can give rise to some deeply important but perhaps lost or buried questions (Chawla, 2002). These include issues that are fundamental to being human such as "who am I? where did I come from? How did the world come into being?" (Bettelheim, 1976, p. 47). The child seeks to explore these in stories, not in the abstract but "as they pertain to him. He worries not whether there is justice for individual man, but whether he will be treated justly" (Bettelheim, 1976, p. 47). The examples of child-led storying in natural environments captured by the Go-ProTM indicated an interest in the fearful idea of wolves, bears or baddies. This insight supports the assertion that archetypal characters help children engage with pressing questions about life through their playful languages. It aligns with the suggestion that it does not matter to children that these are not addressed in the 'reality' of the broader context, but that they are addressed in terms of the developing sense of an individual 'self' in their relations with the world. This perspective and the research data align with the identified function of mythic consciousness in human evolution, though a capacity to create with the world through use of language and symbol (Gebser, 1949). This is within fundamental relations between "the microcosm and macrocosm in the individual soul and the world soul" (Johnson, 2019, loc. 1055).

Noah and Mum See Where 'Bob the Builder' Works

Families' independent Go-ProTM use offered insight into environmental influence through walks in suburban spaces on route to destinations, and the lens of mythic consciousness highlighted its influence on the story characters drawn upon in response to surroundings. The families could be seen to reference characters that reflected evidence of human activity in surroundings, and this can be contrasted with the archetypal themes children engaged with in natural environments. An example of this was given in Noah's walk to the post box with his Mum, through reference made to a story character initiated by him

but then drawn upon by Mum in their continuing conversation. The following interaction

occurs as they start to ascend a bridge, and Noah's attention is drawn to a hole in the

ground that he can see from his vantage point.

Noah: Wow. That Bob the builder. That where Bob the builder works. (He stops

and looks through the railings at the building site)

Mum: Yeah, Bob the Builder has been working, hasn't he? Very messy. Come on

then....

On their return journey, Noah's attention is drawn again to the same construction site and

revisiting the reference to Bob the Builder which Mum joins him in. This instance echoes

the way in which story characters form part of a families' shared references as

demonstrated in the Bear Hunt or the examples of superhero play.

Noah: Who works...whose vehicle is that?

Mum: That's Bob the Builder's

Noah: But what is he doing there at this time?

Mum: It's because he's gone to have his dinner, and he'll come back on Monday

and start again.

Noah: Oh (he turns and continues walking).

This imaginative answer seems to satisfy Noah and illustrates how storied relations might

be felt as a child as unreal but not untrue (Bettelheim, 1976). Bob the Builder is a

character with a life that Noah engages with, even if through fictional means, and can

offer a way of relating the evidence of this activity with a wider human context. Mum's

use of the familiar story character illustrates an engagement with Noah's imaginative life,

and an understanding that this may be more meaningful and convincing for him than a

more abstract explanation. The same is also evidenced on the return journey of this walk

when Noah points out the post-box that they had just visited:

Noah: (Gasps and points) Look, that's where I putted the postcards.

Mum: Yes darling, well done. Postman Pat's got to come tomorrow now.

Noah: Why?

Mum: Because we missed him today. He's going to come tomorrow and get the

letter, and then take it to our friend.

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Noah: Oh who?

Mum: Mummy's friend called Anna, for her birthday. So, thank you for helping

me.

They continue to walk.

Noah enjoys revisiting and talking about the landmarks that they have seen and interacted with on their return journey, and this might be considered in relation to mythic consciousness and its emphasis on circling patterns. Young children can seek to revisit experiences including the repetition of familiar stories (Ezell and Justice, 2005), and highlights the way that shared interactions with children can promote adult engagement with this time form alongside them. The use of story characters from a family's home life demonstrates a widening cyclic process in which the familiar stories can facilitate connections to an enlarged context. Thereby connections can be established that start with the familiar and build the potential for wider relations through empathy and sympathy in this way. Such examples might be contrasted with a language connected with rationality and abstraction as described in mental consciousness, which draws on the widest context as its point of reference. Mum shared her reflections on viewing these fleeting interactional processes and provided the following explanation.

That's what I admittedly do – rightly or wrongly – when I see building work I say, "Oh look, Bob the Builder's mending the roof or if we see a postman delivering letters "Oh, that's Postman Pat's friend". That's my way of relating it to something he knows, because I know what happens in those programmes, I use them to help him relate to his experience – right or wrong – I've never thought about it. It's like a reference world for him to spike his interest.

It's not something you do unless you're with children. Adults know the world; I don't need to give them that back story – to give them context. I know what Noah knows, and that it might even be worth reinforcing, I'll always reference it automatically.

I guess he's making references because he likes the cartoons, and is now thinking "now I'm seeing Bob the Builder world for real" perhaps?

Mum instinctively seeks to support Noah's developing relations with the world through making connections with this home life and the stories that she experiences there with him. An interesting contrast is made between this being called for by a child, but not adults that already "know the world".

Such thoughts might be associated with a process of 'becoming' an adult in a culture oriented to the value in mental consciousness, in which once one has built a capacity to engage with abstract knowledge that other ways of knowing become less relevant, valued or even obsolete. Parenting can be considered a bridging role between child and adulthood and highlights the ways in which being a child and becoming an adult are contextually understood. An adult that "knows the world" can be considered fully developed with an assumed store of insight and knowledge about how the world is constituted. Adult support for children's development towards this is expressed in an Early Years Foundation Stage Curriculum (EYFS) (DfE, 2020) in terms of their gaining 'knowledge and understanding of the world'. However, there is perhaps a subtle difference that can be highlighted through comparison with the adult role identified from a holistic perspective. This can be considered in association with 'The Mother Songs' (Froebel, 1895) and the role of the mother identified as guided by instinct in drawing her child's interest towards "the significance and harmony of Life" (Froebel, 1895, p. 141). The 'Mother Songs' are presented as a means to support "both women and babies to understand their place, role and purpose in the world and connectedness to their surroundings" (Powell, Goouch and Werth, 2013, p. 1). This is therefore a connectedness that accommodates both adult and child, but essentially acknowledges this within a relationality that can "give the child an idea (Ahnung) of an inner world, that is from the outer world to the inner" (Froebel, 1890, p. 8). This description therefore represents a knowing of the world that seeks to connect an inner sense of self with the outer world. In the EYFS (DfE, 2020), this aspect is recognised in terms of the child's 'Personal, Social and Emotional Development' but this is in separation to a 'Knowledge of the World'. It is this impetus towards definition and differentiation that embodies and expresses a difference in orientation. With inclusion of the 'inner world' as part of the context of world, the parenting role is acknowledged as needing to establish a balance between inner and outer. This is a relationship that requires ongoing maintenance across the lifespan: it is not just a question of knowing the world, but a feeling of being in relationship with it that needs to be supported.

7.5 Promoting Outdoor Storied Relations Through Early Childhood Education

It was important for the Preschool that their trips offered effective practice in facilitating

child and family involvement and could support families in connecting with each other

and to a new environment. Story-based activity could offer a means to enable child and

adult engagement, and the trips offered this through interactive storytelling, a story walk,

and nature-based crafting as optional activities. As a language of "complimentary and not

yet contradictory opposites" (Johnson, 2019, loc. 1081), this storying could be considered

a means to facilitate adult and child engagement with the light and dark, earth and sky

and spring and autumn in their surroundings. This activity can be framed according to a

holistic perspective as a language of relationality steeped in archaic and magic experience

that can be supported through community-based early childhood education. The

following extract offers an example of joint parent and child engagement in the

storytelling activity.

Jack and Dad Make a Caterpillar

The facilitative role offered by storying is demonstrated in footage of Jack, his dad and

nan's interactions during the pre-school trip to the local country park. In this trip, 'The

Very Hungry Caterpillar' is shared as the basis for a story walk, and resources are

provided to support making models with found objects. Jack wears the Go-ProTM as he

engages with his dad in making a clay creature for a continuous period of twelve minutes,

and this captures Dad speaking imaginatively about the model and its relations to

surroundings with him.

Dad: There we go. Lovely (pushes caterpillar model slightly)

Jack: My Marshall's all slipping. (Jack is holding a small world play figure)

Dad: Has the caterpillar finished eating yet?

Jack: No!

Dad: Do we need to get the caterpillar some more food to eat later? Shall we go

into the jungle? What do you think the caterpillar might like? Maybe some sticks

and stuff?

Jack: Yeah

Dad: We can put him in this bag, right?

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Nanna: Shall we put him in the bag nice and flat, so he doesn't get broken?

Jack: In

Nanna: Put Marshall in there too?

Jack bends down and picks up stick: A little stick.

Nanna: Put it in there for him to eat.

Nanna: Do you want to do the walk round or the park first?

Jack: Park first.

Dad: Are you sure the caterpillar's got enough food in its bag?

Jack: Yeah.

Jack's extended concentration on this activity might be considered as scaffolded by Dad's parallel engagement (Bruner, 1978), and the adults' imaginative activity as purely for the benefit of the child. From a developmental perspective the adult imaginative engagement might be dismissed as unimportant for them, but from a holistic perspective there can be reconsideration of its significance for the adult too. This is a joint engagement led by the adult in which there is an ideational expression of care for other, and Dad identifies a value in this for children in his reflection on the footage.

Dad: He loved that – making the caterpillar. Getting them to make a caterpillar there gets them thinking about it as a creature and relating that to outdoors more and caring for things and the world and stuff.

Dad therefore identifies this as a child-centred means for 'learning about' the world, but perhaps within this there might be scope to value such experiences for adults too. A holistic perspective promotes consideration not only of a 'rational' measure of knowledge-attainment but gives equal value to consciousness having access to an internal life of sensibility and imagination (Johnson, 2019). Go-ProTM footage at interactional level can offer a child-led perspective that highlights the value for both in moments of shared imaginative and sensory engagement with surroundings. These might not only be moments in which to teach children to care for wider life, but also to enable an adult re-immersion into such ideational activity too. A moment of relative stillness in their busy lives in which there is an immersion in the sensory qualities of the world and making together as qualities of fundamental importance.

7.5.1 Family Outdoor Storying

The role played by family outdoor storying has received limited research attention to date, and where it has, this has been from perspectives seeking to broaden consideration of human-environment relations. Such perspectives include the Native American practice of "walking, reading, and storying land" described as a means for "making sense of physical or biological worlds" (Marin & Bang, 2018, p. 89). The research has sought to address cultural bias in ways of knowing and describes storying as a use of language in which both "explanation and theory live" (Marin & Bang, 2018, p. 93). This is a way of knowing understood to unfold "in the micro moments of interaction while walking" (Marin & Bang, 2018, p. 90) and draws upon the semiotic resources of "material artefacts, ideas, and actions people both perceive and create to engage in interaction" (Marin & Bang, 2018, p. 89). The value of family outdoor storying has also been identified from a spiritual perspective as offering a 'family pathway' to children's spiritual development. The significance of being outside lies in the potential for the natural world to awaken "spiritual curiosity making connections that embrace the holistic development of a young child" (Harris, 2016, p. 93). This includes immersion in seasonal changes that can support a sense of connection with wider life, and the role of stories lie in their potential to be emotionally stimulating. Such community activity can promote the spiritually valued qualities of connection and belonging and knowing others in the community for encouraging compassion and kindness. It is proposed that such activity "supports us to wholeness, opens us to our souls and hearts, and motivates us to live" (Harris, 2016, p. 100). However, in parallel with the previous perspective, this can occur within 'micro moments' when qualities are "quietly embedded as children and families play and celebrate together in outdoor natural spaces" (Harris, 2016, p. 92). These contemporary understandings of the values offered by family outdoor storying might be considered in relation to a call to "live with our children" and the potential that:

"Play truly recognised and rightly fostered, unites the germinating life of the child attentively with the ripe life of experiences of the adult and thus fosters the one through the other".

(Froebel, cited by Liebschner, 1992, p. 24).

7.6 Summary

Mythic consciousness represents a use of language and symbol in storied form that promotes empathy and sympathy with surroundings. This is a language of relationality described according to a circling pattern in which humanity co-creates with the life that surrounds them. Such processes offer the potential for forming connections between immediate experiences "in the individual soul" and those of the whole as the "the world soul" (Johnson, 2019, loc. 1055). A consideration of this in relation to research materials has drawn attention to the ways that children and adults draw on familiar stories from home in forming relations with the life they meet in their locality. Child-led engagements have indicated an interest in archetypal characters and themes, which psychoanalytic theory highlights as an essential meeting between the sense of self in relation to surrounding life (Bettelheim, 1976). This is key foundational learning from a holistic perspective as early childhood is identified as involving an "endeavor to represent the inner in and through the outer, and to unite the two, to find the unity that connects them" (Froebel, 1887, p. 50). Adult-led engagement has drawn upon children's familiar stories from home as means for highlighting parallels between their own family context and those seen in wider life. In this way, adults seek to present the world as a safe place to their children. Both might be considered as significant in forming relations of empathy and sympathy with surroundings but given the focus of this research on the potential to learn with children, there may be an important message here. Children can remind us of the significance of the sense of self within the whole context, and how this might be supported for children in ways that may seem counter-intuitive to adults. The footage also illuminates the role played by natural environments and the storied relations these facilitate, and the potential relational value this might offer to children, families, communities and environments. Such experience can support an imaginative engagement with more than human life and to consider this in relation to our own. These insights are drawn from a relatively small sample but suggest that family outdoor storying may represent an area worthy of further research attention.

A contemporary support for storying can be found in a growing interest in the value of 'enchantment'. This can be understood as the potential for being "highly affected: a sense of openness to the unusual, the captivating, and the disturbing in everyday life" (Bennett, 2001, p. 131). This seeks to counteract a 'narrative of disenchantment' understood as

enacted through a cultural dominance of scientific understanding and rational goals. Attention to 'enchantment' promotes consideration of the qualitative nature of humanenvironment relations, and recognition given to the potential for affective experiences to motivate ethical behaviour. The word enchant is linked to the French verb to sing and thereby that to "en-chant" involves the potential to "surround with song or incantation; hence, to cast a spell with sounds" (Bennett, 2002, p. 6). This definition might be considered in connection with both an underlying magic consciousness that recognises the wider life of which we are part, and mythic consciousness as our means for forming relations within this through meaning. The language of stories is significant for enchantment as means for promoting a "sense of awe, of connection, of belonging to a mysterious world which has many depths and layers to explore" (Blackie, 2018, loc. 2449). Stories can do this through a message of our potential for transformation, and reasons to change in fundamental values. Such values are enunciated in the archetypal features of fairy tales, and these can satisfy children's questions about their self-identity in relations with the world. Recognition of the role played by storying in shaping human perspectives is therefore suggested to merit a re-engagement with "the fairy stories we loved as children, and the myths which entrance us still as adults" (Blackie, 2018, loc. 2594). These can offer "a more enriching set of values to live by" and "all the secrets for a meaningful, sustainable life" (Blackie, 2018, loc. 2598). Such values are conveyed through story messages that remind us that

"The greatest treasure of all is a kind heart; the most powerful magic always is made from an act of love; and no life-saving or world-changing goal can ever be achieved without the help of a community of others – human and non-human alike".

(Blackie, 2018, loc. 2598).

The Go-ProTM footage has demonstrated children's potential to influence adults in fleeting moments that are qualitatively significant from a holistic perspective. Such influence can draw adults away from established 'storied' relations etched into suburban environments and constructed paths, and instead into direct contact with wider life and an imaginative capacity to story our relations.

8 Mental Consciousness

8.1 Introduction

Mental consciousness can be considered to represent the human capacities receiving greatest emphasis in current education (Mahmoudi *et al.*, 2012, Neves, 2009). This consciousness structure is based on our use of language in association with abstract knowledge and rational thinking and represents the grounds upon which a distinction between adult and child might be most sharply differentiated (Gebser, 1949, Chawla, 2002). A focus at interactional level can be illuminative, and a holistic perspective highlights the potential to consider how our rational capacities may hamper our wider relations. This can be considered in relation to a need to use our full capacities for forming holistic relations with a whole context.

8.2 What is Mental Consciousness?

Mental consciousness is accessible through language and symbol, and

"Structured by an observing I/eye that assesses the environment objectively, evaluates it in the abstract, and measures it rationally and often quantitatively".

(Chawla, 2002, loc. 2665)

Its ruling 'term' is defined as 'ego' or 'I' and its ruling sense is sight (Gebser, 1985), and this shapes a perspective in which "space is perceived in three dimensions, oriented to the one-point perspective of the observer's lines of sight, and time becomes an "arrow" – an irreversible quantified line" (Chawla, 2002, loc. 2666). Mental consciousness is suggested to afford "perspective, paradox, abstraction, rational reflection, and self-assertion" (Chawla, 2002, loc. 2665) but that there is scope for these to be expressed in both effective and defective forms. In its effective expression these powers of focus can be illuminative and support self-efficacy and self-esteem. However, a 'one-point' perspective can also contribute to the creation of "precarious dualities" including "self-versus other, subject versus object, man versus nature, adult versus child" (Chawla, 2002,

loc. 2665). In spiritual evolutionary terms, this consciousness structure represents the deepest experience of separation from surrounding life within human individuation (Gebser, 1949). This gives rise to an emphasis being placed on the outer world as foundation for 'truth' and shapes a cultural belief that "if the mental cannot "measure" the measureless, it is not real" (Johnson, 2019, loc. 1245). In its defective expression, this can lead to mechanistic thinking that "spatializes and then employs what it has spatialized" (Gebser, 1949, p. 83), and combined with a defensive egoism can reduce the 'other' in surroundings and people to mechanisms to be manipulated and consumed.

This consciousness structure can be challenging to consider through recognition that it represents a dominant influence in a current 'developing' world culture (Simard, 2021, Zylstra et al., 2009). Additionally, that although "each structure expresses its own ontological reality" this consciousness structure is limited by a "wakeful, mental claim to exclusive objectivity" (Johnson, 2019, loc. 1245). Mental consciousness can be aligned with a current understanding of knowing in terms of the potential "to have information in your mind" (Cambridge Dictionary, 2020), however from an evolutionary perspective this is a state suggested to hold the means within it for its own mutation. A process is described in which "categorical maps burst and swell with the burden of complexity" (Johnson, 2019, loc.1608), and this is accompanied by a growing sense that although knowledge and reasoning are important these do not offer "our deepest connection with the natural world" (Johnson, 2019, loc. 2670). The mental consciousness structure can offer greatest scope for human creativity as the expression of the broader creative potential of 'Origin' but carries a challenge to our capacity to self-manage in ways responsible to the whole. This can be understood in terms of a spiritual evolutionary journey in which there is a learning to be 'truly human' through a process of individuation in which we learn how to become whole. This can align with Froebel's Laws of Unity and Opposites, in which humanity learns about the wholeness of life through making connections across its diversity of expression. This human potential to "self-fashion" is described as "a tremendous responsibility to bear" (Johnson, 2019, loc. 1226), and involves learning to balance our self-expression with an accountability for our actions and consequences.

It is pertinent here to highlight a parallel between the mental consciousness structure and a Froebelian perspective on language and the visual sense. This parallel can be discerned in the impacts associated with these capacities on our relations with surrounding life. This holds a particular pertinence to this research through the role identified for language in human development and the family unit as a site of intergenerational influence. Froebel identified language as playing an important role in life's 'destiny' linked to a transition between the experience of a state of unity with surroundings in childhood and a state of separation in adulthood. A childhood state of unity is expressed through play in which the child "imparts to each thing the faculties of life, feeling, and speech" (Froebel, 1887, p. 50). In early childhood, language operates predominantly through speech described as a form "in no way differentiated from the human being" (Froebel, 1887, p. 50). Development into adulthood involves learning through life conditions in which "the totality of what surrounds man as his outer world cannot be known by him in its oneness; he can find it only in the knowledge of the peculiar nature of each thing" (Froebel, 1887, p. 91). Language operates through a process that "outwardly opposes" humanity and surroundings but "unites them inwardly" in meaning (Froebel, 1887, p. 93). In parallel with Gebser's description of mental consciousness, Froebel too identified the scope for a more 'defective' expression of language. This deficit resides in our potential to "not feel the meaning of what we say, for our speech is made up of memorized ideas, based neither on perception nor on productive effort" (Froebel, 1887, p. 88). However, there is an opportunity for this to be re-enlivened in "the few rare cases, when our discourse rests on intercourse with life and nature" when we can again "enjoy its life" (Froebel, 1887, p. 88). One means for promoting such experience resides in learning to live with children and through this giving "meaning to our speech and life to the things about us!" (Froebel, 1887, p. 88). This therefore describes a process of separation that takes effect across the whole lifespan, but within which there is the potential to integrate our capacities and regain a sense of unity once more.

The family can be considered a significant language learning context as the young child develops this skill whilst in the state of its "complete, unbroken unity" (Froebel, 1887, p. 50). There is scope for this to be positive or negative: it is the influential potential that is identified here. Language-acquisition is outlined as the means for developing a potential

to "see all things rightly" and "designate them rightly and accurately" (Froebel, 1887, p. 51), and this pertains to objects, their properties and their relations to one another. Language acquisition therefore offers a means to learn through the law of opposites but ideally in a state of unity provided by a family. A process is described in which adults can "add the explanatory word" to a child's experience and thereby "join the visible with the audible" (Froebel, 1887, p. 81). This process can bring an experience "nearer the child's insight and knowledge, nearer his inner perception" (Froebel, 1887, p. 81), and offers means to connect an inner sense of self and exterior world through the uniting experiential dimensions of a 'spherical law' (see section 3.7.3.2). This process is seen as beneficial within a holistic understanding of family relations, in which the "vigor of inner and outer life" of the child can be "guided and guarded" (Froebel, 1887, p. 83) whilst an "all-quickening, creative power" can "be translated" (Froebel, 1887, p. 89) from child to adult (Froebel, 1887, p. 89).

This description of the function of language can also align with a contemporary biological perspective through which there is understanding that "human beings do not exist in nature, nature arises with us, and we ourselves arise with it" (Maturana, 2000, p. 459). Within this "dynamic co-arising" humans "explain ourselves and our circumstances while operating as observers" (Maturana, 2000, p. 459). The visual sense and language-use are linked through understanding that "as observers we distinguish what we distinguish as distinctions of relations in our operation as languaging organisms" (Maturana, 2000, p. 461). Language is therefore internal and functional to the living system of the human being, who operates in a domain of reflexivity. By use of language humanity can reflect upon their conditions of living and in so doing are able to conserve these conditions. This biological understanding aligns with a mental consciousness structure oriented to vision and language that aids a human capacity for self-reflection and self-assertion (Gebser, 1949). It can also align with a Froebelian understanding that language functions to differentiate surroundings in terms of objects, their properties and relations to one another (Froebel, 1887). However, from a holistic perspective this differentiating function of language is framed according to consideration of a human potential to grow conscious of its own life as expressive of the whole. As a process this involves an integration of our whole human capacities to support insight into the holistic nature of life of which we are part. This represents an engagement with the idea of a 'spherical law' (see section 3.7.3.2) that essentially lifts relations away from the page and into holistic dimensions. Such ideas

can be challenging to read, write and think about, but it is this that is being explored here in relation to its potential to be empirically recognised.

8.4 The Go-Pro Intercepts Adult and Child Interactions

The Go-ProTM offers a means to intercept adult and child interactions and convey a sense of children's '100 languages' (Malaguzzi, 2012) in a medium that adults can attend to. Its use also holds the potential for a disruption of these and represents the grounds explored in this research process. Spoken and written languages are shared meaningsystems that call upon memory use, and these might be considered to contrast with "children's 100 languages" that do not "separate the head from the body" or "think without hands" (Malaguzzi, 2012, p. 5). This therefore represents the grounds of a contrast in perspective, between that of a more long-ranging view and that of experience in the moment. Child-worn Go-ProsTM have offered a means for capturing exchanges across child and adult languages, through an illumination of children embodied and emplaced interactions. However, the Go-ProTM can also interrupt children's embodied languages at times, through an orienting to vision and children's awareness of this. The methodological framework of sensory ethnography can accommodate this reflexive engagement with language through its underpinning concepts of place, perception, knowing, memory and imagination. Within this, language-acquisition can be understood in terms of a process of 'knowing in practice' (Wenger, 1998) that is both historically connected as well as "inextricable from our sensorial and material engagements with the environment" (Pink, 2015, p. 40). The Go-ProTM in this research has formed "part of the ecology of place" (Pink, 2015, p. 243), and it is one in which children and adults share outdoor experiences together. The Go-ProTM has been able to be part of this context, and perhaps interrupt these relations at times, but simultaneously offer scope to revisit experiential processes. It is this that has offered the means for an adult engagement in children's embodied languages, and through this to reflect on the nature of shared outdoor family experiences and consider what they offer.

Drawing upon mental consciousness in analysis has highlighted child and adult interactions attuned to the visual sense and language-use in naming and knowing. This is in accordance with a current operational understanding of 'knowing' as having

"information in your mind as a result of experience or because you have learned or been told it" (Oxford English Dictionaries, 2020). The footage has illuminated moments in which this happened in family interactions, and the ways in which these processes were influenced by child, adult and environment. The developmental differences in height, experience and cognition between adult and child can influence what is noticed, and the footage demonstrated a contrast between adult-led engagement led by prior knowledge and child-led engagement led by interest in surroundings. Such processes might go unnoticed without being highlighted and reflects a suggestion that instances when our "discourse rests on intercourse with life and nature" are rare (Froebel, 1887, p 88). However, this is accompanied by the assertion that it is this process that can reintegrate language with experience and through this we can again "enjoy its life" (Froebel, 1887, p. 88). These instances can be understood as situated by a cultural context oriented to an adult perspective, and a valuing of our capacities for language and abstract knowledge. Use of a holistic lens however offers the opportunity for a cultural re-evaluation, and to explore what is offered by a child-led engagement that raises its cultural value. The following extracts from research will exemplify this meeting between child, adult and environment, and the potential for influence across these relations within our everyday lives. The value of this for adults is yet to be recognised but identification of its potential offers a starting place, along with a holistic perspective that highlights the significance in integrating our fullest capacities. Use of a vocabulary for our holistic relations has revealed the possibility for its discernment in small moments, and an underpinning holistic philosophy that links these fleeting experiences with our deepest and fullest potential.

8.5 Examples of Child, Adult and Environment Relations

James and Mum on the Pre-school Visit to the Stables

A difference in visual orientation and abstract thinking was demonstrated in footage of James and his Mum pushing a pushchair along a track on the pre-school stables trip. I accompanied the family as they walked past fields of horses which they came into closer proximity with when they stopped at the end of the track. The following is an extract

from their conversation as they walked and then stopped, accompanied by descriptions of the surroundings that they commented on or reacted to.

Mum: Are you excited to see the horses? (They walk along the track past fields of horses on either side)

James: Yes

Mum: Look at this field with all the little buttercups James?

James: Yes, yes, Mummy. (doesn't turn in that direction. James turns and walks towards long grass at the side of the road) Wow! (As he stands in the middle of it)

Mum: Stay at the side there (a car comes past on the track). How many buttercups do you think there are James?

(James recites numbers ordinally whilst walking, rather than seeming to count buttercups)

Mum: Can you see the horses over there?

James: Yeah, they're really far away.

(They reach a field at the top of the track with horses in it, and stop for a moment to look together)

Mum: Look, aren't they lovely?

James: Yeah...they are eating some food.

Mum: Oh look, that one's got a moustache.

James laughs

Mum: He's got a little beard like Daddy. Can you smell their poo?

James: Yeah.

This conversation reflects an example of family interaction influenced by their movement in a public space. Mum's attention is split between pushing the pushchair along an uneven track whilst staying aware of the potential for traffic and seeking to ensure that both James and his baby brother are happy and safe. This is all whilst taking in surroundings and seeking to share the experience with James. Her questions are oriented to their planned destination and what she can see in surroundings, and she seeks to engage James's attention in the 'teachable moments' that she identifies. These orient to skills in abstraction and sights at a distance however the Go-ProTM footage illuminates that James cannot see what his Mum sees from her vantage point. Instead, his attention is drawn by the potential for immersion in long grass at the side of the road and it is this that elicits

his wonder. While they are moving together there is not the opportunity for them to share in each other's experiences. However, when they reach the top of the track, they stop for a moment, where there is a greater opportunity for shared attention, and the nature of their interaction is changed. In this, Mum's attention is drawn to the multi-sensory qualities that they can experience together, and she demonstrates her familiarity with the nature of James' interests. This example illuminates the family context as a site of transition in the process of being a child and becoming an adult. Their height difference is highlighted in their sensory orientations and demonstrate the ways in which these can support either a multi-sensory immersion in direct contact with surroundings or an orientation to the visual sense and abstract knowledge through distance. The environment was influential on their interactions in supporting the potential for them to stop and experience a close encounter with the horses together at the end. Without this, the adult might have remained attendant to destinations, sights at a distance and to abstract questions and not been enabled a moment for a different qualitative experience. Unfortunately, it was not possible though illness to gain Mum's reflections on this footage, however it offers a useful example of the contrast in adult and child visual orientation and their influential relations.

Jack, Dad and Nanna Naming, Knowing and Finding Out

The following example illustrates the way in which adult-led activity could dominate at the start of outings but could transition through influence from child and environment. This could be enacted though adult identification of new environments offering significant learning opportunities and drawing children's attention to aspects they identified as noteworthy and sharing information about this. Such activity could sometimes be associated with a concern to occupy children's attention, and an identified parental responsibility to manage children's behaviour. This type of engagement could also be associated with building vocabulary, and the following example of Jack, Dad and his Nanna on the pre-school trip to the country park illustrates both aspects of this adult-led activity. Froebel highlights a significance in language-learning but suggests it is to be held in balance and accompanied by an adult potential to live and learn with children. This family had arrived late due to school commitments and therefore did some of the activity separate to the rest of the group, including their setting off on a walk into the woodlands together.

Jack: (Gasps) There's a bird!

Nanna: Ooh, where?

Jack: There! (points)

Nanna: Know what type of bird it is?

Jack: A white and black bird

Dad: (laughs) Very good. It's called a magpie.

Nanna: Do you remember the bird we saw yesterday, Jack?

Jack: Yes

Nanna: Can you tell Daddy what it was – that green one that we saw. Can you

remember its name?

Jack: No, I can't remember its name

Nanna: Begins with wood-

Jack: Wood

Nanna: ...and what's its second name?

Jack: Err. Can't know its second name.

Nanna: Wood - pecker.

Jack: oh Daddy, it's a woodpecker.

Dad: Wow!

Jack: We found...(gasps) I wanna go down here...

Dad: Yeah? This way? Ok.

Jack: Go on the Lion

Dad: Did you know – lions go really fast.

Jack: Hmmm

Dad: ...and they can run up to 15 miles per hour...

Jack: Yeah... (he stops and picks up a feather and looks at it)

Dad: A feather? Lovely. (Jack puts it in the scavenger hunt bag)

Dad: ...and Jack, did you know, a lion can roar so loudly, you can hear the lion

roar from five miles away.

Nanna: Wow!

Jack: Can go this way... (he chooses a small worn pathway off the main path and

through the undergrowth).

Dad: oh, that's a good way into the jungle.

Jack: Yeah. Let's go zigzag.

Dad: Yeah? What type of animals do you think we'll see in the jungle?

Jack: Let's see any more animals.

Dad: Dragons?

Jack: No. Let's find out...

This conversation evidences the way in which language-use draws on memory and is demonstrated here in relation to the identification of properties and naming of objects. Jack's attention is captured by the discovery of a bird in this example, but he seems less well-attuned to seeking its signification. Young children might respond to an adult-led engagement of attention in naming and knowing, but the footage here demonstrates a stronger draw on Jack's attention from the surroundings and their affordances. The information that Dad shares might be interesting in different circumstances, but in this context may not compare with the sensory stimulation in the environment and its pull on a child's embodied responses. Parents can be considered as motivated to provide children with the cultural tools that best support their transition into 'becoming' an adult. Language can expand human attention from the immediate to the abstract and this represents a key identified stage in their development (Piaget, 1936, Vygotsky, 1978). This understanding underpins current early years educational guidance (DfE, 2020) which can influence parents in their desire to support their children's development. In this research, child-worn Go-prosTM offer a means to explore the nature of this transition and its relation to emplacement, and a holistic perspective invites consideration of where values are placed in processes of perception and knowing. This example illustrates Dad pulling on the broadest context of abstracted human knowledge in relation to surroundings, and Jack highlighting the potential to engage with surroundings in ways that are more immediate and experiential. Such a contrast includes the spontaneous nature of children's playful relations with surroundings, which can represent a challenge for adults to recapture a capacity for, but which might also be experientially influential.

Dad's reflections on footage highlight the ways in which the surrounding culture and environment are shaped by a mental consciousness structure. In a cultural context of increased time and space pressures children's attentional needs are brought into adult awareness, and Dad's reflections on the country park is partly framed by adult concerns about children's attentional needs:

If you go to the country park, you've got the playground, running about, football, games, bug hunting, feeding the ducks, counting fish, what different types of fish can we see. It's trying to catch them before they get bored with playing in the playground. Even at home, we've got so many different toys and things they can do, and they'll play with something for less than five minutes and they're onto something else and they've not put away the first thing. So, they just have short attention spans.

Children's potential for independent mobility can enable them to shape their own agendas which might include an interest in difference and change pursued in ways alternative to adult understanding (Beery & Jorgensen, 2018). However, adult facilitation of outdoor access brings children's attention under their remit, and perhaps also to be measured in relation to adult perception and understanding. A cultural expression of mental consciousness can be embedded in environments and shape our relations through interaction with them. This might be understood as equally expressed in toy manufacture to which children can demonstrate a disconnection (Oldfield, 2012) or spaces designed for meeting their recreational needs (Gill *et al.*, 2020). From adult perspectives, spaces that stand outside this cultural influence might start to be identified as 'other' in some way. Jack's Dad exemplifies this view in an observation that "There's quite a few things to do in the county, as well as these little corners of *other* space". As adults we might be oriented to the "things to do" but children can demonstrate a value in "other" spaces, and perhaps our potential for 'being' and 'becoming' lies in their interconnection (Uprichard, 2008, Burman, 2008).

Consideration of the potential for a mental consciousness structure to be expressed both individually and culturally can highlight children's embodied languages through their alterity. Children's attraction to the "overgrown interstitial spaces" (Chawla, 2015, p. 436) has been described in terms of their potential as

"Undedicated, unmanaged, undeveloped ground where unplanned, unsupervised and unexpected discovery can take place".

(Chawla, 2015, loc. 3989).

This description of children's 'habitats and the embodied languages they enable, might

be in opposition to those shaped and oriented to "an observing I/eye that assesses the

environment objectively, evaluates it in the abstract, and measures it rationally and often

quantitatively" (Chawla, 2002, loc. 2665). Instead, there is recognition of children's

capacity for 'undoing' an adult concern with such activity and breaking through spaces

defined according to such needs. By contrast 'children's habitats' enable their potential

to learn about themselves as much as they learn about their world (Hart, 1979), and

highlights the relevance of a holistic perspective in considering an integrated sense of self

in relation to surroundings. The interaction shared here represents one minute of sixteen

minutes-worth of Go-ProTM footage, in which Jack subsequently leads Dad and Nanna

into an exploration of the woods along foot worn paths. This extract marks the transition

between an adult-led engagement in naming and knowing and a child-led compulsion to

explore the unknown and to 'find out'.

Lucy and Mum Feed the Ducks

The following is an extract from the interactions between Lucy and her Mum whilst

feeding ducks during the pre-school trip to the local historical site. These initiated with

an adult-led engagement in 'teachable moments' through prompts by Mum to name what

Lucy can see in surroundings. However, through Lucy's extended attention the focus can

be seen to shift towards the animals' appearance and their behaviours. Mum later reflects

on this in the sensory elicitation interview, and comments that illuminate this process will

follow. Lucy has limited language and is not especially vocal, so much of the narration is

expressed by Mum, but with influence on this from their shared attention.

Mum: What colours are their beaks, Lucy? (Mum points and Lucy looks)

Lucy: Black and white

Mum: ...and what colour noses? (Mum points to her nose)

Lucy: Red.

Mum: Red. Well done! Do you like them?

Lucy: Yeah. One more (she points to the bag of bird food and wants to throw them

more).

Mum: One more?

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Lucy is watching the birds as they fly down and land on the pond. She throws them some food.

Mum: Can you see these ones? They're called seagulls.

Lucy: Yeah

Mum: They're greedy, aren't they?

Mum suggests that they walk back up the bank away from the pond. Lucy sighs when she reaches the top and she turns back and watch the birds.

Mum: There you go. They're very nice. Ooh...There's lots of them isn't there?

How many do you think there are?

Lucy: (points and counts ordinally to ten) There's all of them.

Mum: There's lots and lots and lots of gulls isn't there?

Lucy: Yeah, and boys.

Mum: (hesitates) No - gulls - not girls - gulls are the types of bird? The white ones flying in the air - they're gulls. Here they come. Those ones are swans, and they're geese.

Lucy: (looks from side to side) Yeah.

They stand and watch the birds.

Mum: Wow! Do you want to come and have a look? (They walk back down the bank so that they are closer to the pond again). Aren't they nice?

Lucy: Yeah.

Mum: Which ones are your favourites?

Lucy: The white ones

Mum: (laughs) You like the gulls? I like the black ones because they're really pretty.

Mum shows Lucy how to throw the food to reach the birds in the pond. Lucy successfully throws food in, and she laughs.

Mum: Can you see how they're paddling under the water? (They watch for a while). Can you see how the gulls are coming and swooping down and grabbing some food and they fly away again? (Mum starts to narrate the birds' activity as they watch them) ... They come swooping down, grab some food, and fly away again.

Lucy laughs at the birds.

Mum: Is that good? Here we go...some of them are a bit bossy, aren't they? Then the big ones tell them off. They say "Go Away, that's our dinner" ...here we go...see, very quick those little ones, aren't they? Look at this little one down

here. Look...quick, quick, quick...eating all the dinner...before the others come along and eat it. Wow!

Lucy laughs again.

Mum: Look, here comes a pigeon. He won't go in the water.

Lucy: Yeah.

These interactions reflect early learning activity understood as based on shared attention upon which further insight can be developed through adult support (Vygotsky, 1976). This offers foundations upon which language structures can be built as a significant aspect of a child's enculturation (EYFS, 2021). However, this example demonstrates a shift in focus influenced by Lucy's extended interest in watching the birds, and through this they start attending to their behaviour rather than looking and naming. Child-worn Go-ProTM footage has been suggested to bring "size into perspective" (Green, 2016, p. 284) through its potential to enable adult viewers to see how big they and other environmental features appear to children. However, it may not only be the scale of surroundings in relation to children that is significant, but also what children's scale and interest can bring back into focus for adults that is of value too. Such a shift in understanding can be seen demonstrated in Mum no longer finding the more commonplace gulls appealing, but through Lucy's interest in their movement, there is a fresh perspective brought to the accustomed. This shared interaction demonstrates the role of language in supporting biodiversity identification, but also the potential for "memorized ideas" to dull attention to surroundings if not based on "perception nor on productive effort" (Froebel, 1887, p. 88). The significance of this can be illuminated through children's attention and interactions, and in the sensory elicitation interview Mum's comments offer insight into the way in which Lucy's attention influenced her own.

Oh, its "there's the geese" and then you do start seeing little bits and pieces. Maybe you might normally say "oh, there's the ducks" and go do something else – but actually noticing the different ducks' behaviour, and can you see them underwater and how they feed...?

The novelty of such experience to children can influence adults to reattune their attention to surroundings and perhaps spark processes in which "our discourses rests on intercourse

with life and nature" (Froebel, 1887, p. 88). Through such shared experience, it is perhaps possible for the appeal of the usual and familiar to be seen with fresh eyes once more, through slowing down to a child's pace and noticing what they draw attention to. This is perhaps a subtle shift, but in the process of reflecting on this Mum describes this observation as motivating intentions for future activity with her daughter, and states:

It's nothing for us...yeah, it's a leaf, but that leaf, that daisy, that one feather, twig...massive. I want to build on that I think, would be a lovely thing.

This highlights the value offered by a new lens, and for taking time out of busy life to look through it and appreciate the experiential richness within such ordinary moments. Such an example falls in line with research findings identifying the potential for shared adult and child experiences in wild spaces to become increasingly attuned to children's perspectives over time (White, 2015). Mum described a sense of stepping into a child's way of 'being' in relation to surroundings through this process, and this is supported in her reflection on the value in this.

Yes, watching that I felt like a child again. "Oooh, let's go and play with the sticks...or let's go and play with the geese, or..." It's really strange, but really nice.

In this instance, seeing from a child's perspective highlighted the potential to draw attention away from identification, and to have language re-invigorated through contact with the world it describes.

Tom, Sara and Dad Pick and Name Wildflowers

The following extract is taken from Tom's Go-Pro[™] footage on a walk around a lake with his sister Sara, dad and baby sister in a pushchair. This example illustrates the impact of an environment that enables children to move more freely and its influence on family interactions. These highlight the family as a language-learning context, and the potential to include the significance of children's '100 languages' within this. Tom and Sara's interactions occurred as they raced each other while searching for wildflowers growing

in the grass beside the path to pick. Dad is involved in these interactions largely through naming the flowers, and this might be considered a co-constructed engagement with mental consciousness which integrates influence from other experiential processes too.

Tom: There's more – more Blossom.

Dad: What are them ones called? Do you remember? What are those ones called?

Tom: What are they?

Dad: Dandelions

Tom: I will show the camera (he crouches down towards the flowers growing in the grass). I showed 'em. (Sara holds out her bunch of dandelions under the camera)

Tom: (gasps) Look at these ones Daddy. Look at these. Look at these flowers (he runs back and picks some, and then return and adds them to the basket under the pushchair. When he gets back, Sara is holding out a buttercup for him)

Sara: Tom, look what I found. It's a different one.

Tom: Shall I show the camera?

Sara: What are these called Tom?

Tom: Dad?

Dad: Yeah.

Tom: What are they?

Dad: Err...buttercups?

Tom: Yeah. I'll get that one (he spots another one in the grass and runs of to pick

it. When he returns to the buggy, Sara hands him a different flower) Oh thanks.

That's why I love you. Let's show the camera. What are these ones? Dad, do you

know? (They all continue walking along) Do you know these ones?

Dad: Err, they look like bluebells – but they're white. Do you think they're white

bells?

Tom: Yeah.

In this example Tom and Sara treat the Go-ProTM almost as another family member to share their experiences with, and their age difference is demonstrated in Sara's understanding about how the camera's range of 'vision' operates. This captures family interactions involved in language-acquisition, which Sara demonstrates her awareness of through emulating Dad's prompt questions. She reveals this by showing the flower to the camera, thereby illuminating links between the visual sense and use of vocabulary for

identification. This footage highlights how in this instance this is happening in connection with a young child's propensity for collecting items found in the natural world, understood as an activity "primarily for play, exploration, and interest" (Beery & Jorgensen, 2018, p. 13). Dad's engagement in language teaching happens through this and he acts as a resource of knowledge for the children to call upon, as well as leading them in a teaching role. Beery and Jorgensen (2018) clarify that this type of 'collecting' behaviour is self-motivated, and that a key characteristic is interest in the exotic, unique, strange or demonstration of "interesting variation" (Beery & Jorgensen, 2018, p. 19). Children's engagement in such activity is suggested to support the building of "a personal and meaningful relationship with the natural world" (Beery & Jorgensen, 2018, p. 15), and its significance has been highlighted in both experiential and environmental education (Dewey, 1938, Roberts, 2012). It is suggested that children's agency can develop with and through this activity (Gibson & Pick, 2000), and that if this experience is layered with 'reflections' can raise biodiversity awareness in long-ranging ways significant to environmental education (Thomashow, 2002). Such an approach can offer a holistic model of learning through which it is possible to "see the link between our human experiences of nature and the health of our natural systems" (Beery & Jorgensen, 2018, p. 23). The experiential component of learning is therefore an important foundational layer for abstract knowledge that can add substance through the depth of connections formed. The shift offered by Froebel and Gebser's holistic perspectives resides in the equal valuing of experiential and reflective processes across the whole lifespan, and therefore, that our holistic relations with surroundings can be built, renewed or revived at any stage. This can occur through the potential for an individual's whole relations to enable experiences of immediate surroundings to be connective to a whole context.

A Froebelian perspective on this family's interactions highlights Dad's role as significant in supporting Tom to differentiate a dandelion and to designate it "rightly and accurately" (Froebel, 1887, p. 51). However, this process has happened through Tom's self-motivated interaction with the flower and has enabled its properties and relations to be experienced as part of this for them both. This might be understood as a more balanced relational process in which children's perception can support adult experience of place, whilst adult memory can support children's knowing and imagination. Tom can be seen to draw Dad's attention to an unknown flower based on its difference, and this engages them in

naming it a white bell "based on the perception of the thing it designates" (Froebel, 1887, p. 89). This child-led experience might be considered in contrast with some of the examples seen of adult-led orientations to the visual sense and language, which are to sights at a distance, destinations not yet reached or removed from sight completely as abstract knowledge. A holistic lens highlights the difference between an adult-led engagement that draws directly from abstract knowledge and children's that are based on experiential relations with surroundings. This is a fleeting moment within a family's interactions, but its potential significance is brought to light through equal valuing of all ways of knowing in pursuit of holistic health. Such observations offer but a starting point and glimpse into the potential to re-interpret our experience, and perhaps one worthy of further exploration. This can be considered in relation to a current promotion of "actively noticing nature" as significant in building nature connection (Richardson *et al.*, 2021).

Ellie Plays 'I Spy' on a Walk to The Park

The following example can demonstrate environmental influence on adult and child interactions and the role that the visual sense and language can play in this. This highlights what might be considered a cultural expression of mental consciousness through rational environmental design, and the ways in which this can shape its inhabitants' relations with surroundings. This was demonstrated in this family's independent use of the Go-ProTM in recording their usual ways of 'spending time in nature', and features Ellie, Amy and her mum on a walk to the park with a friend and her eighteen-month-old son Asher. Parks and playgrounds are identified as the "most common places where children experience the natural environment" in the UK (DEFRA, 2019). This example illustrates the ways in which the environment that surrounds a park forms part of this type of engagement. The Go-ProTM is worn here by Amy who is six years old and demonstrates the outing holding various challenges to the families. Challenges included getting everybody outside and walking together along the street in ways that kept everyone safe. This excerpt is taken as they arrive on the street and set off on their walk to the park.

Asher cries and does not want to walk, and his Mum picks him up for a short period and then puts him down after carrying him a short distance. He is looking at something in his hand. She announces, "Let's go!", and has hold of him via a set of reins. She explains:

"He doesn't like holding hands at the moment. He has a massive fit and falls to the floor. It's a nightmare."

Amy wants to hold the reins, but Asher's mum explains that she doesn't want him to realise that he is wearing them. There is a little delay in everyone setting off on their walk along the path as Ellie wants help from her Mum, and Asher refuses to walk and is picked up and carried by his Mum. They are on a pathway next to a road of heavy traffic which is very loud.

Ellie and Amy's mum suggests: Shall we say what we can see?

Amy: No. You.

Mum: What can you see? What can you see?... I can see.... a bridge (as they start to walk over it).

Amy speaks to the Go-ProTM: We can see a bridge, and a car.

Asher's Mum: ...and water.

Amy: We can see water. We 're gonna have a look at the water. (They all go to the rails and look through them at a stream and overgrowth on the banks below). The water's very fast.

Mum: Can you see anything else down there? We can see long grass.

Amy: We can see long grass.

Mum: Come on. Let's keep walking and see what else we can see.

Amy: (Talking aloud to the camera) We're basically just playing I spy.

These interactions illustrate the ways in which an urban environment can dictate an orientation to the visual sense. Although this may represent another family challenge to be tackled just like their engagement with the muddy path, this opportunity did not appear to be as experientially fulfilling for any of them. The game of 'what can we see' is designed to focus children on their visual sense and language in order to manage their embodied interaction with surroundings. This need for restricting children's movement highlights the many benefits in promoting a greening of urban infrastructure and future child-friendly cities (UNICEF, 2021, Gill, 2021). The lack of suitability of urban space to children's needs is currently demonstrated through the Urban95 Project, as a virtual reality experience that allows adult users to become the height of a 3-year-old at 95cm within a fictional urban realm. Its purpose is outlined as seeking "to convince thought

leaders of the importance of creating an urban environment that works for babies, toddlers and the people who care for them" (ARUP, 2020). The significance of this is delineated in holistic terms, through identification of child health as a measure of a healthy living environment for all. This is outlined in the suggestion that

"The wellbeing of babies, toddlers and their caregivers is the best measure of a vibrant, prosperous and healthy city. Yet, they can be invisible to city leaders as a group with specific needs".

(ARUP, 2020)

The vocabulary of consciousness structures can not only highlight a lack of fit between urban spaces and children, but perhaps also qualitatively illuminate what might be better suited to families in holistic terms. On Ellie's arrival at the park, the footage demonstrates the children being drawn to explore puddles and walk along the walls around the edge of the play area. These represent examples of whole-bodied play and exploration that children could have engaged in outside the flats they had just left if this had been deemed safe. This example serves to highlight the influence of a cultural expression of mental consciousness in environmental design, that rationalises function to silos that become destinations, and includes the experience of a 'natural environment'. An influence can be discerned on both child and adult embodied experience, family interactions, and perhaps start to highlight the significance from a holistic perspective of child-friendly cities as a measure of healthy environments for all.

8.6 Summary

The mental consciousness structure has drawn attention to use of the visual sense and language in family interactions, and the ways in which these capacities can serve to abstract from the immediacy of other forms of experience. Go-Pro™ footage has illuminated impacts from the development of these capacities between child and adult and the ways in which this can shape an orientation to surroundings. Young children's stature means their vision is oriented to shorter distances and is closer to the ground and their engagements are through embodied interactions. By contrast adult attention can be drawn to sights further afield and their attention influenced by the abstract knowledge they bring to experiences. These observations align with the assertion that during the early stages of cognitive development perception conducts thought, but that through

development into adult capacities that perception then obeys thought (Wilson, 1995). A focus on influential relations demonstrated the potential for adults to draw children's attention to items they identified as significant in surroundings through reference to abstract knowledge. Children did not always respond to adult calls on their attention, as the sights may be too far away or abstract knowledge may be less appealing than their own physical engagement with surroundings. However, there was the potential demonstrated for a shift during visits from adult-led interaction at the start towards joint activity influenced by children. The natural environment can be considered influential within this through effects identified through Attention Restoration Theory (Kaplan and Kaplan, 1989) and Stress Recovery Theory (Ulrich, 1991). This was dependent on environments being safe enough for adults to relax their attentions towards children's safety, and through this for children's mode of engagement to start to lead adult activity. Examples of children's influence demonstrated their potential to draw adult attention towards familiar sights in immediate surroundings, and to a multi-sensory engagement with their qualities. This process could happen in conjunction with language-learning, which if child-led, could then be combined with visual attention or direct contact with the object. Although these represent brief moments in busy family lives, it is the significance of the quality these hold that is identified from a holistic perspective.

The nature of these observations aligns with research findings based on children's use of cameras in 'wild' spaces (White, 2015). The shared vision offered by camera-use was suggested to facilitate "opportunities for adults to see nature anew—through the eyes of children—as physiognomic, imaginative, and a deeply relational, often personal, experience with nature." (White, 2015, p. 173). The vocabulary of holistic relations explored in this research can align with this description of children's relational capacities, promote the value of these for adults, and highlight the potential for this to be promoted in shared outdoor experiences. This observation aligns with the assertion based on childled photography that "there is equally, if not more, to be learnt by the adult who takes the time to listen and 'see' through the insights of the individual child, as a dialogic partner, rather than 'teaching' (transmitting) principles" (White, 2015, p. 187). Such a view also echoes a call to live with our children and "through them give meaning to our speech and life to the things about us!" (Froebel, 1887, p. 88). A holistic perspective asserts that life's vitality is supported by our capacities for forming whole relations within a whole context.

The significance of this potential for relational depth will now be considered in the next chapter on the integral consciousness structure.

9 Integral Consciousness

9.1 Introduction

Integral consciousness represents the final stage in the evolution of human consciousness according to Gebser's theory (1949). The first four stages are described as archaic, magic, mythic and mental consciousness and these represent the development of a sense of self in relation to other. The process initiates with an indistinguishable 'I' that transitions through an egocentric and then polar position, and into a present-day consciousness described as "the unambiguous "I" that is doing the thinking" (Yiangou, 2017, p 431). This position is depicted as leading us to step out of "the circle of congruity with their world...world-centric, where identity is with humanity at large" (Yiangou, 2017, p. 431), and represents the furthest development of our human individuation. The next stage in integral consciousness involves a conscious choice to re-join wholeness with awareness of the value in this position (Gebser, 1949, Yiangou, 2017). Integral consciousness can be understood as the wholeness of all life experienced individually, and a synthesis of descriptions of this state are drawn from Gebser (1949), Johnson (2019), Yiangou (2017) and Chawla (2002). A holistic state can be challenging to explore as it engages with the potential for multiple connective and continuous relations, but here through its consideration in a more linear written form. It is useful to remember that moving beyond a mental consciousness structure is described as a process in which "categorical maps burst and swell with the burden of complexity" (Johnson, 2019, loc. 1608). This can be difficult to engage with, but it is this that can highlight the potential for our deepest relations with the world. Integral consciousness was identified as emergent in the publication of 'The Ever-Present Origin' (Gebser, 1949) and that this theory offers an "account of the nascence of a new world and a new consciousness" (Gebser, 1949, p. 1). The invitation offered by this theory is that of a disruption and through this the potential to attend to "the first stirrings of the new" (Gebser, 1949, p. 4). Consciousness can be considered as a human capacity for perceptions, thoughts, and feelings and these can be taken together and understood in terms of awareness (Sutherland, 1989). The potential for its spiritual evolution involves our human agency, and as a state yet to be attained, this will involve a transition (Gebser, 1949). The invitation in this chapter is to engage with a description of this process and to consider the ways in which the findings might illustrate this. Reference will be made to the 'integral perspective', and this reflects the activity of those that currently engage with this idea or understanding.

9.2 What is Integral Consciousness?

Integral consciousness is the state in which humanity gains insight into the holistic nature of all life inclusive of their own. It is described in the following terms:

"Integral reality is the world's transparency...a mutual perceiving and imparting of truth of the world and of man and of all that transluces both."

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(Gebser, 1949, p. 7)
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Humanity can be thought of as whole according to their consciousness structures, and the world can be experienced as whole through their integration. The integral consciousness structure can enable humanity to orient to a space and time freedom, and through this their potential for an ego-freedom. This can be considered in terms of a holistic conception of life in which it is possible to gain an experience that "Time is whole, and therefore you are whole" (Johnson, 2019, loc. 79). A sense of a 'diaphaneity' or a transparency of our worldly conditions is offered though this and enables a discernment of the effects of modernity and a greater fluidity in our modes of being. This may represent a rather dense and complex description of human holistic experience but conveys an understanding that this represents a transition that is profound. Our contemporary context characterised by planetary scale problems may be calling upon this need for our whole human potential as described in the following:

"Only the integral human being, one who has wared the whole, is capable of overcoming their own fragmentation and leaping from planetary crisis to planetary consciousness. This is our individual and collective task".

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(Johnson, 2019, loc. 196)
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Drawing upon the first four consciousness structures in this research has illuminated the potential to identify experiences that can align with these states. The subsequent integral stage represents a new worldview that rests on integrating these previous stages of

consciousness and through this can herald a new relationship to time and space. It is this that can give rise to a human consciousness described as "cosmocentric...identity is with nature, the manifest world and oneness" (Yiangou, 2017, p. 431), and a transition into this can be understood as a crisis for the human ego. This transition involves an experiential opening to life beyond the self that calls upon a "primal trust" (Gebser, 1949), and is accompanied by an understanding that this offers the means for an individual to feel part of the whole. This is insight that can only occur through being in and part of the world, and through the individually experienced phenomenology of an embodied and emplaced being. Current worldly conditions are highlighting the need for this transition, and it is suggested that "perhaps it is only when the world is darkest that we might seek new pathways – new "lines of flight" ... to at least try out for ourselves" (Johnson, 2019, loc. 1321). The planetary scale problems may offer a prompt:

"We must continually ask ourselves, what is catastrophe telling us? We can begin to ascertain the signal through the noise and therefore planetary cultures of the future."

(Johnson, 2019, loc. 171)

An exploration of this perspectival lens in this research has illuminated moments of experience that offer potential 'lines of flight' into the new, but these are from within the fabric of our given conditions.

9.2.1 A Transition through Time's 'Irruption' into Time's 'Concretion'

Evolution out of mental and into integral consciousness is described as a phased process that initiates in time's 'irruption' and moves through time's 'concretion' (Gebser, 1949, Johnson, 2019). Time's irruption starts in the spatializing mental age through systemization and gives rise to an anxiety-inducing orientation to clock time experienced as a force speeding up and out of control (Gebser, 1949). Within this phase "time becomes a force pressing upon us; a new reality breaking through, but one for which the mental power of measurement is an insufficient response" (Johnson, 2019, loc. 1053). There is the potential within this for humanity to realise the limits of their control over surrounding conditions, and this is through this experience of time as a "runaway force in the uncontrollable march of technological upheaval and social revolution" (Johnson, 2019,

loc. 1053). The phase of time's 'irruption' is then followed by time's 'concretion' when time comes to be experienced as an acute phenomenon. This transition involves a reintegration of consciousness structures "very much alive, though latent in the present" (Johnson, 2019, p. 10) through their lived experience as 'concretization'. It is asserted that through this there is potential for the "concretization not of space, but time" (Johnson, 2019, p. 50), and to "translate what appears to be an uncontrollable force – time unmastered by the mental – to the conscious realization of time-free origin" (Johnson, 2019, loc. 1271). This can be understood to make possible the concretion of the spiritual and an overall transitional process is described in which

"Promise and peril feed into one another in the Mobius strip of becoming. In our time of speed and extinction, technological rapidity and ecological collapse, time is breaking up, breaking in, and concretizing all at once".

(Johnson, 2019, loc. 1626)

The transition through time's 'irruption' and experiences within this of its 'concretion' happens not in a strict linear sequence but in "chaotic bifurcation points where the old fuses dangerously with the new" (Johnson, 2019, loc. 1617). The evolutionary challenge lies in humanity becoming conscious of whole relations as foundation for actions and consequences, and essentially calls upon our co-operation with wider conditions. This is a process that must be learned through individual experiences that relate to the whole, and through this influence the being and becoming of both.

9.3 Research Evidence of Time's 'Irruption'

These descriptors have been drawn upon in considering research findings and whether these reflect a sense of time's irruption within current conditions, but the potential for a discernment of time's concretion within this. Evidence has largely been drawn from sensory elicitation interviews in which parents reflect on moments of shared experience with their children and the ways in which this highlighted their relations with the wider context.

9.3.1 A Tension Between Adult and Child

The description of time's irruption might be considered in connection with contemporary barriers to child and nature contact identified in the changing nature of environments we live in and our increasingly timetabled lives. It is these conditions that impact on children's independent mobility and create conditions in which adults now spend more time outside with children. At present, these conditions are identified as contributing to a child and nature problem through an interdependence of child and adult needs and their facilitation. The tensions that this can give rise to are demonstrated in parent reflections on their decision-making in going outside and how these are negotiated with their children. These children's negotiations are relatively successful, and this may be considered reflective of self-selecting participants that chose to attend an outdoor trip. These comments were prompted by footage, and therefore indicate the issues that this reflection gave rise to in parents. The comments highlight the significance of the wider context currently situating parents and children outside together and reflect a tension played out between a child's bid for 'freedom' and adult responsibilities. The following comments from parents give their reasons for going outside with their children.

Mum of Emily (4 years):

"They get fed up with being cooped up. It doesn't matter how many toys they have to play with, they just prefer being outside...even if we have a nice day at home...and we'll say we're going to have a garden day today, she'll say...you know, we have to really persuade her...tell her we're going to get the paddling pool out..."

Dad of Jack (4 years old) and Starla (6 years old):

"The kids are always happier when we go out. We don't know why. Other people have said they have the same problem as well. Maybe at home its more of a confined space than the beach, the country park or zoo...there's lots of squabbling and stuff like that in the house – which is a shame as we've tried to make the house really nice."

Mum of Ellie (3 years) and Amy (6 years):

"It's just freedom...something new...they can do what they want...not being told what to do. I think they get bored when they're stuck indoors. They've got their toys – but it's not new to them, is it? They like exploring – so I like to try different parks - so it's not the same one all the time. Just let them explore and get excited by the new ones."

Mum of Aisha (3 years old) and Nathaniel (5 years old):

"When my kids are out... they just love exploring...they love being out. There's nothing that they don't like when they're out. They don't really care – they just like to be out doing stuff."

Mum of Jake (aged 2 years):

"He likes the trees...the birds in the sky...to have fun. Run around. My mum calls him a 'do-er'. He likes to look around and point at things. He likes his freedom."

These comments highlight a relationship between a child's drive towards having freedom to move, the sensory stimulation this offers, and the potential in the environment for meeting this need. Parents described this in terms of a child's need for 'freedom', 'exploration' and 'doing' and this can be contrasted with descriptions of being 'stuck', 'bored' or 'cooped up' if at home. Parents' decision-making processes are therefore largely driven by children's behaviour and their need to manage this within ongoing family life. However, this pull by children towards a freedom to move can be understood to sit in balance with the responsibilities held by adults, and insight into this tension can be seen in the following comments.

Dad of Jack (4 years) and Starla (6 years):

"It's very hard to keep on top of the house...I get no chance to do work when the kids are awake, and then when they're asleep there's all the housework to be done.

It's a real juggle to fit everything in...but being out of the house with them, out of all these things, seems the less stressful...they just seem to be happier and free-er outside".

Mum of Emily (4 years) and Jude (9 months):

"She won't let me forget if we've had a day in. The second she wakes up "Right, what are we doing today? I have to tell her today's plans – if I've got jobs or whatever, and we'll go to the park this afternoon. It goes back to making deals with her, so if we do have a morning in doing jobs, that when I'll say "Right, we'll go out this afternoon".

Mum of Noah (aged 4 years) and Oliver (7 months):

"The effort it takes to get out the house – especially with two. You've got to pack bags, snacks, pram, and then the effort of cleaning up afterwards – that unfortunately is a factor if I'm thinking about "Do I want to go somewhere decent?". Also, Dad's been out all week – probably a bit cold and wet in the bones – so he'd prefer to be indoors in his spare time...so that affects my decisions about where to go and time factors."

Mum of Aisha (3 years) and Nathaniel (5 years):

"Getting out the door is probably the hardest bit".

These comments illuminate the contemporary conditions identified as impacting on children's relations with nature which are positioning adults as children's gatekeepers and aligning their time agendas. However, a holistic perspective can offer a new framework through which to consider these conditions, and this will be outlined by drawing on the two key Froebelian principles explored in this research. This includes a consideration of the child in relation to family, community, nature, culture and society, and a respect for the integrity of childhood in its own right (The Froebel Trust, 2021).

9.3.2 The Child in Relation to Family, Community, Nature, Culture and Society

9.3.2.1 Family in the Community

The holistic perspective highlights the significance of the whole relational context, and potential for influence within this as multi-directional. Although current conditions hold problematic barriers to child and nature relations, these are also providing conditions for children's influence through them. This might be considered in relation to reasons parents gave for going outside with children, which included emotional regulation and sleep promotion. Benefits from this were recognised not only for children but for the whole family, as highlighted in the following comments:

Mum of Emily (aged 4) and Jude (9 months):

"They're just sort of happy and free...they've got the room to run around, haven't they? Never wants to go home. I think for me as well - I get a bit cabin fever if I'm indoors all day. You just get a bit lazy, and it's good for the mind, isn't it? To be out...a bit of fresh air. It wears them out too. She always sleeps well."

Mum of Ellie (3 years) and Amy (6 years):

"They're happier when we're out. You can see it that they're enjoying themselves more than being stuck indoors. So, if they're happy – that's why we're going to go".

Mum of Aisha (3) and Nathaniel (5):

"We go out just to have a good time. Literally. They'll be happy in a park. Nathan is active – he likes his scooter. She likes getting into things".

These comments can be linked to current literature that identifies the health benefits of physical activity and this is outlined not only in terms of body function and disease

prevention, but also the promotion of social benefits. This is summarised in the UK Chief Medical Officer's Report (2019):

"The relevance and importance of the wider benefits of physical activity for individuals vary according to life stage and various other factors but include improved learning and attainment; managing stress; self-efficacy; improved sleep; the development of social skills; and better social interaction."

(Dept. of Health and Social Care, 2019, p.19)

The broad nature of such benefits is also associated with outdoor play, and these are described in terms of being "critical in helping children to process their emotions, live out their anxieties and build friendships and resilience" (Children's Commissioner, 2018, p. 5). Although the evidence base is less well-developed at present, it is also suggested that outdoor play can have broader benefits for "the wider family and community too, through improved family wellbeing, reduced anti-social behaviour and vandalism, and even increased volunteering and social action" (Children's Commissioner, 2018, p. 4).

The following comment from a parent in this research offers an example of the influence that children can exert on family activity, and through this, their broader social and environmental relations.

Mum of Emily (4 years) and Jude (9 months):

"I mean I wouldn't be doing these sorts of walks...I mean I would be walking, but its more to entertain her that I've got out the house and do these things. I'll have to get a dog or something when she's grown up. Something to get you fit...and you end up speaking to other dog owners, and that sort of thing. We saw Maria that works here the other day, and of course Emily went running straight over, and then my neighbour came along with her dog, and they didn't know each other – but their dogs had met, so they're like "its fine, our dogs know each other" - even though they didn't actually know each other personally – it's like "I know you, I know your dog". It's funny, yeah."

This observation highlights the influential potential that sits in the balance of relations between children, adults and local environment. The child, or indeed a dog's physicality and need for movement can act as an impetus in getting outside, and if there is suitable local space, then also the potential for social and environmental relations. This highlights the significance in this research context of impacts from ongoing urbanisation, which families identify as leading to a loss of green open space in walking distance from home. This also highlights the significance of thinking in holistic terms, and the potential not only for wider conditions to be situating family interactions, but also through this, the potential for children to exert an influence that can radiate out across these relations. If we take seriously the potential for children to influence adults our current conditions might be understood to offer an opportunity for children's playful, embodied voices to have a role in shaping wider relations.

9.3.2.2 Nature, Culture and Society

The significance to communities of local green space is presently recognised in UK policy, which suggests that

"Better green infrastructure will promote local social interaction and help to develop strong community networks through participation and shared achievements."

(Defra, 2018, p. 76)

However, the evidence in this location is that new development does not always adhere to the National Framework of Green Infrastructure Standards (DEFRA, 2018p. 7) in ways that are meaningful or long-term. There is growing recognition of the value in future urbanisation of convivial spaces described as "open, public locations...where citizens can gather, linger or wander through" (Shaftoe, 2008, p. 4). This reflects a growing contemporary insight into the value in relations between people, places and behaviours as a basis for holistic or ecological health (McLeroy *et al.*, 1988). Children's bid for 'freedom' to move, play and have nature contact is playing an influential role in raising the profile of these issues, and this might be considered in relation to a process of time's 'irruption' through which these disparate issues start to converge. Some parent comments

demonstrate the ways in which the current local social and environmental relations in this context could be unsupportive to holistic health within it.

Mum of Aisha (3) and Nathan (5):

"We had a letter through the door saying that children shouldn't be running through the washing lines. What do you expect children to do? It's so not kid-friendly at all. It's a communal area, but you're not allowed to put anything outside like a little slide. The best thing for me is not to have my kids around there. So, I just take my kids, and we have fun days."

Dad of Tom (aged 3 years) and Sara (6 years):

"We don't have a garden, and don't really spend that much time at our house. Nan and Grandads both have lovely gardens – we can travel".

Mum of James (aged 4) and Tyler (4 months):

"I used to live in a village, and now I live here, but it's hard to find out what's going on here. I used to hear about things word-of-mouth, but here it's more of them and us, rather than – there's this going on, let's support each other."

These offer insight into a growing need for families in this context to factor in travel as part of their access to outdoor space and echo parent comments in prior research into family outdoor activity in this locality (Watts, 2017, unpublished). These parent reflections illuminate the complex opportunity and orientation-related factors identified as impactful on children's current nature contact (Soga *et al.*, 2018, Cox *et al.*, 2017). However, there is the potential to consider these circumstances according to time's 'irruption' and for change to be occurring through these processes. This might be considered in relation to the following parent's comment, and its highlighting of a juxta positioning of freedom and responsibility that can play out across child and adult relations.

Mum of Aisha (3 years) and Nathan (5 years):

"It's just cos you've got the responsibility. Take out the responsibility and children ain't nothing. Know what I mean? They're so easy to get through the day with. I just feel that they've got to deal with me as much as I've got to deal with them."

This asserts the potential to value children's ways of being as highly as adult responsibilities and does so through an identification of the value in qualities such as ease. This might be considered a contemporary echo to a call to "live with our children" (Froebel, 1887, p. 89), and through this to consider what adults might learn through the freedom, contentment or joy of children's play. Such a view might be deemed as gaining increasing contemporary recognition in the holistic benefits of outdoor play for children, families and communities (Children's Commissioner, 2018). However, although this is identified as a goal worthy of pursuit, it is still currently in need of wider recognition, support and implementation. A holistic perspective can offer a significant contemporary contribution through its orientation to a vision of the whole currently understood according to its parts. This can frame present conditions as a transition through time's 'irruption', and barriers to children's nature contact as representing foundations for a reconnection with the whole. This highlights the significance of a holistic integration of our rational capacities expressed in urbanisation with equally significant deeper humanenvironment relational needs. The influence of prevailing conditions is described in the following way:

"In the mental structure time is still the divider, and so long as we continue to perceive it this way it will go on dividing and disrupting and separating space".

(Johnson, 2019, loc. 1764)

We might consider present conditions according to a cultural 'blind spot' prompting need for a fuller engagement of our sensory capacities in determining a path through them. This might frame insight into the influence of children, and indeed dogs and convivial spaces as equally significant components of holistic health in communities and beyond.

9.3.3 Resolving the Tension Between Adult and Child through a Holistic Perspective

The juxtaposition of freedom and responsibility and adult and child agendas can be considered significant from a holistic perspective. This can be contemplated in relation to a human evolution through a deepening separation in which there is the experiencing of polarities or dualities that become more precarious (Gebser, 1949). This can also be considered in relation to Laws of Unity and Opposites as means for learning about life's wholeness through finding connections across contrasts (Froebel, 1887). The resolution envisaged from both holistic perspectives resides in the potential to find balance, and this can be between both a sense of an inner and outer world and our being and becoming.

9.3.3.1 The Integrity of Childhood in its Own Right

It is Froebel's philosophy that offers guidance for balancing relations between adult and child, and this is through play that unites and "thus fosters the one through the other" (Froebel, cited by Liebschner, 1992, p. 24). In this way play is identified as means for adult and child to develop together and this might be considered in relation to parent reflections on their reasons for going outside. These refer to its positive effect on children, and despite difficulties and challenges in managing this, also wider benefits to the family. There is identification of an additional workload in managing this, but that once moving people feel better, their mood improves and there is a sense of ease. This can be considered in relation to understandings of play and its identified benefits. A contemporary description of play is that it is "when children bring their individual knowledge totally under their own control and 'pretend'" (Ouvry, 2003, p. 9), as a state that children can slip in and out of in both experiencing and expressing an understanding of life. It is suggested that "for this flowing between the real and imagined, children need space to move and freedom to move" (Ouvry, 2003, p. 10) and highlights "a very significant reason for giving young children access to the outside" (Ouvry, 2003, p. 11). This can be compared with Froebel's description of play as means for an experience of "joy, freedom, contentment, inner and outer rest, peace with the world" (Froebel, 1887, p. 55) as a state that rests on "free self-activity and self-determination" (Froebel, 1887, p. 11). Both descriptions might be considered relevant to parent reflections on their reasons for going outside with children and will now be considered in relation to the potential for an experience of time's 'concretion'.

9.4 A Transition: Time's 'Concretion'

Time's concretion is when it comes to be experienced as an acute phenomenon and involves transitioning through a re-integration of consciousness structures. This has been explored through this research and the illuminative potential of a vocabulary for holistic relations. It can be considered as having brought into focus experiential qualities in ordinary moments that highlight the holistic nature of life. Social and cultural conditions are currently situating children and adults in sharing outdoor experience together, but through this the potential for influence between them. The significance of this is highlighted by a holistic context encompassing immediate to remote relations, and experiential qualities promoted by adult and child that can span across these. Such relations might be contemplated as obscured through cultural conditions and influential values, but present and available as revitalising information.

9.4.1 Child Perspectives as Moments of Time's 'Concretion'

This research has explored the potential for young children's developmental state to be influential on adults in shared outdoor experiences. The vocabulary of consciousness structures offers a means to consider each form of engagement as equally significant and that together these can be expressive of our full relational potential. As a lens this can reframe taken-for-granted family outdoor interactions and illuminate within them the potential for holistic experience. Concretizing can be understood as the potential to "make (an idea or concept) real" or give it "specific or definite form" (Oxford English Dictionaries, 2020). This might be considered in connection with influence from young children who draw adults into direct contact with surroundings, ask 'big questions' about our relations with wider life and ignite our capacity to story relations with them. However, this sits within our full relational capacities, and adults can be understood to equally draw children out towards their abstract capacities for relations with the whole context. Together these can represent our potential for whole relations and offer means for forming immediate and remote connections through the qualities of both. A holistic perspective brings to awareness an inner sense of self that sits at the centre of these connections and forms the foundations for all ongoing relations that radiate out to the whole context. Strength in holistic relations is identified in the quality of balance, and this can be considered in terms of a sense of self and other and the qualities of connection between them. This can be understood not as an equation to which there is a solution, but an ongoing state to be maintained. The shared experiences captured in this research might be considered to promote a balance between experience and potential, responsibility and freedom and adult and child. The findings highlighted through the lens of each consciousness structure will now be considered in terms of their potential to contribute to whole relations, or to a state of integral consciousness.

9.4.1.1 Moments of 'Archaic' Consciousness

Archaic consciousness has drawn attention to the experiential qualities of embodiment and emplacement, and the information gained through this in informing relations between self and surroundings. The research materials highlighted this particularly in relation to children's propensity to move freely in open spaces, and the emotional states that this could give rise to. Children could be seen to express joy in their own capacity for movement, and through this the potential for emotional contagion in accompanying parents. This state of both physical and emotional movement could be linked to having safe space for its expression and through this the potential for impacts that were instantaneous. The action, activity and sensation were in the moment and not necessarily premeditated, and these conveyed an expression of 'being here and now' and 'being me'. This might be considered in relation to the archaic consciousness as an expression of an indistinguishable 'I' and a pleasure in embodiment and emplacement that does not rest on conceptualization. Slower paces of movement enabled greater potential for a shared focus in family attention, and for children to influence this experience through their multisensory and imaginal ways of being. This could draw adult attention to the sensory qualities of surroundings that may have become taken-for-granted over time and thereby go unnoticed. This can illustrate the suggested benefit of 'living with children' and within this a need to "give heed to the gentle admonitions of their life" (Froebel, 1887, p. 89). The shared nature of this experience could be linked to their being away from the home and for adults, their associated responsibilities. Archaic consciousness could also be considered in relation to adverse environmental influences that lead parents to inhibit children's movement in urbanised environments due to perceived risks. Shared adult and child experience might be understood as having 'quality time' together in which each can focus on the other, and a holistic perspective emphasises the potential benefits in this for

them both. Children could influence the environmental qualities experienced through embodied and sensory engagement, and through this highlight the depth of experiential qualities that any moment can hold. This term 'quality time' is perhaps interesting to consider in relation to 'concretion' and its drawing attention to the significance in our experiences of qualities of time.

9.4.1.2 Moments of 'Magic' Consciousness

Magic consciousness is also concerned with pre-linguistic experience and behaviour and describes the emergence of a sense of self that is separate to surrounding life (Chawla, 2002). This budding sense gives rise to the potential for relations with surroundings, and within these conditions the scope of our human agency. As this is an emergent state there is a greater sense of reciprocity and this is described according to the hearing sense through which information from the 'other' can be absorbed. This consciousness form is difficult to explore as an observer but in this research has drawn attention to encounters between participants and the wildlife that they encountered in natural environments including birds, squirrels, rabbits and insects. These meetings gave rise to children's 'big questions' about the world (Meehan, 2017), that expressed a curiosity about the other life forms' relations to their own. Children's questions centred on whether they could be considered a friend or foe and involved the potential expression of a fear or fascination about this. Adult responses demonstrated a sense of responsibility to convey positive relational values but might also be accompanied by more bio-phobic emotional responses towards other life. These encounters highlight the core issues at play in self and other relations, in a need to balance self-protection with recognition that the other embodies a life that is just like our own.

Human agency can be understood to mediate our relations with surroundings and to this we bring our creative capacities. In this research, its expression was discerned not only in children's relations with 'Animal Allies' but also in their engagement in 'Adventures', 'Maps and Paths' and 'Fantasy and Imagination' (Sobel, 2008). Attention to adventuring and making paths involved children's agency in making choices about routes taken and involved an interaction with the undergrowth in natural environments and imaginative engagement with the life that could be in it. Adults could be seen to join children in this

activity through concerns about letting them out of their sight in public spaces, but through this to engage with their questions, imaginings or musings about other life along the way. Children's 'big questions' (Meehan, 2017) and 'everyday adventures' (Gill, 2014) can be considered as purely relevant to children's learning, and the adult role as a facilitator of this for their benefit. However, a holistic perspective highlights the significance of 'big questions' for us all, and a need to take seriously and reconsider our engagements with wider life. It is children's fresh eyes and interests that can bring awareness to our ongoing human cultures, and through their playful example, demonstrate our capacity for a creative response. If we take seriously a holistic perspective this can challenge our perceptions by considering that children play out at local scale the nature of our whole relations. The challenge resides in a human capacity to acknowledge our potential for an arrogance or "conceit", through which we "lose sight of this natural and divine starting-point of all human development" (Froebel, 1887, p. 68). The evolution of consciousness can be understood as development through the human ego, and within this an integration of our capacity to learn, listen and care.

9.4.1.3 Moments of 'Mythic' Consciousness

Mythic consciousness draws attention to a human capacity through languages to story relations with surrounding life according to chosen values. This is a use of language that is positively disposed to relationality through its orientation to complimentary terms, associative forms and affective processes (Gebser, 1949). This could be seen across many examples of family interaction in which they drew upon familiar stories from home as a shared language in forming relations with wider life. However, there were thematic differences demonstrated in child and adult-led engagements, and insight into this was informed by drawing on wider relevant literature (Bettelheim, 1976, Warner, 2014, Zipes, 2009). Child-led engagements could demonstrate a drive to face fears in unknown spaces and could find expression in seeking to engage with story characters such as the Big Bad Wolf or a Bear. However, adult-led engagements could demonstrate an instinct to protect children and present the world as a safe, friendly place inhabited by other life just like those in familiar stories. A psycho-analytic perspective highlights the importance of the self in relation to surroundings, and a need to look beyond the superficial features of stories and consider the deeper human needs that these serve. This can be considered in terms of the potential to face one's fears, and through this to build confidence in one's

own capacities to do so (Bettelheim, 1976). This is identified as a key foundational experience in building a sense of self, and one demonstrated by children in this research. Arguments for a contemporary need for a re-enchantment of our human cultures suggest that the archetypal themes in traditional stories can hold messages of significance to us all (Blackie, 2018). At a profound level these highlight the human potential to act in pursuit of fundamental values and its contemporary relevance demonstrated in an interest in wisdom sources supportive to worldly conditions. Storying is identified as important for building human relations with place (Witt, 2017), and this research indicates the ways in which families can instinctively engage with this in their local interactions. A holistic perspective emphasises the significance of an inner sense of self at the centre of relations, and the ways in which our affective responses can contribute to this through immediate experiences. Mythic consciousness highlights the significance of the role played by storied language in its potential to build a trust in our capacity to live out our human values.

9.4.1.4 Moments of 'Mental' Consciousness

Mental consciousness highlights an orientation to the visual sense, language use and our capacities for abstract thinking (Gebser, 1949, Chawla, 2002). This could be identified in both adult and child-led examples that demonstrated a subtle difference between whether attention was led by ideation or through an engagement with surroundings. Adults demonstrated the potential to draw children's attention to aspects identified as significant through abstract information. Adults sought to share this information with children and engage children's cognitive skills through prompts to name or count. However, child-led engagements could arise through direct engagement with surroundings, and attention through this to its qualities and properties as foundations for naming and knowing. This perhaps imperceptible difference could lead adults to pay attention to environmental qualities and to slow down and look for longer at taken-forgranted aspects of surrounding life. This can highlight the potential our cognitive capacities can exert through a 'crystallizing' effect on experience, in which 'knowledge' becomes retained in memory and can then influence and shape our subsequent engagement. This might be considered in terms of the potential for our relational capacities to move towards an energetic or indeed attentional inertia. This represents a shift away from an expression of 'being here, now and me' in children's impulsive,

embodied behaviour and towards a broader perspectival orientation in adult rational capacities. Integral consciousness highlights the value in their potential assimilation, and for our long-ranging preservative tendencies to be effectively counterbalanced by more vital, affective experiences. This might be considered in relation to the message of learning to live with our children and through this for an adult orientation to surroundings to be enlivened by their ways of being. This might also be considered in terms of the potential for a human evolution towards integral consciousness that occurs through a 'concretion' of our experiences of time.

9.4.2 Integral Consciousness: A Transition through Moments of Time's Concretion

Such momentary experiences can be fleeting and may draw adult attention consciously, unconsciously or not at all. The potential for this rests on seeing a value in them, and a holistic perspective emphasizes that this involves choice. We can choose to stay oriented to an 'irruption' of time through prioritization of rationality that shapes our environments and time-use within it. However, there is a potential to hold up this historical legacy to critical assessment, consider its effects in relational terms, and explore what is offered by the experience of time's 'concretion'. A holistic perspective highlights a sense of self in relation to the world as central and seeks to establish the effective means for supporting connectivity between them. It identifies a sense of vitality in environmental relations as supportive and that an integral part of 'knowing' involves our affective domains. Shared experiences between children and adults may be considered as contributing to whole relations through children's potential to draw adults into experiences of immediate surroundings involving noticing, feeling and storying. These capacities might be considered to counterbalance adult orientations to abstract knowledge, rational function and a concern with our more remote relations. A holistic perspective asserts that there is a potential to distil our fears built on a self-defensive ego through the potential to connect with support through holistic relations with the 'other' in our environment. This involves a surrender of our defensive ego and a compassion for past mistakes, but through this the potential for a greater maturity in our 'becoming' through capacities for more whole and balanced relations with surrounding life. The suggestion of this research is that if one looks with a holistic framework, then it may be possible to counterbalance a current pessimism with a discernment of our latent human potential. Such possibilities may be hidden in the subtle differences of qualitative experience, and the brief moments in which these occur which can offer scope for change within and through prevailing conditions. A further area of research findings will now be shared that offers some illumination of the potential that a moment of experience can hold. This is within the 'inner world' of the individual, and the ways in which this can inform surrounding relations in ongoing ways.

9.5 The Significance of a Moment

9.5.1 Parent Identification of the Significance of Moments as Memories

From a holistic perspective, the whole relational context can be considered in terms of time as well as place, and to be inclusive of the 'interior' world of individuals as well as an 'exterior' world. This was illustrated through parent comments on the significance of their own childhood memories, both in terms of the potential for current activity to evoke these, or for memories to act as a source of motivation to current activity. Sensory ethnography accounts for this through its recognition that "individual biographical past experiences are implicated in the constitution of place in the present" (Pink, 2015, p. 44). The memories that parents referred to offered them a source of comparison, and this could be in terms of similarities in childhood activity or differences in the potential for this to be met by the environment. In this way, the influential relations between children, adults and environment could be both interpersonal and intrapersonal.

Mum of Noah (4 years):

"Here there's the river walk, and we walk along it, but you can't get down the riverbank. I grew up in Cumbria. I remember going off on my own, sitting by a stream and being very whimsical. It was quite safe. You accept the situation that you're in – don't question it, until you come to a different environment where you can't do that. As a child I could actually go right up to the river and throw stones in – but, here, they can't get so close now in a built-up environment."

Mum of Lucy (3 years) and Becky (6 years):

"We had a school farm. I didn't really like school – all I wanted to do was be on that farm – that was my reason for going to school every day – and I went from there to train at agricultural college...so yes, I'm outdoorsy, and Lucy's a bit like me – really loves animals, will happily spend all day in the garden..."

Mum of Liam (aged 4 years) and Ava (aged 6 years):

(In the footage, Mum is supporting the children in climbing some trees in their favourite place to visit after school)

"Me and my brother used to come down here, and I used to climb this tree when we were kids".

Such memories can indicate inner connections that run through ways of being in relation to surroundings, and similarly the role that the environment can play in supporting these inner connections. A sense of this has been identified in relation to enduring childhood memories in nature that have been described as significant 'spots of time' that can "retain a renovating virtue" (Wordsworth, 1805, 12.208). These have been suggested to offer "moments of clarity" or "moments that merit our return and meditation" (Chawla, 2002, loc. 2526) and is interesting to consider in terms of their significance in our inner worlds, and the potential for a qualitative experience of time's 'concretion'. Sensory ethnography offers a means to attend to this through its consideration of the sensory nature of memories, which can be understood as the activity of embodied and emplaced beings (Seremetakis, 1994, Marks, 2000). Memory recall can also be understood as reconstituted through 'practice' as an experiential way of knowing (Wenger, 1998), and is described as a process of "not mere repetition but a transformation that brings the past into the present as a natal event" (Seremetakis, 1994, p. 7). In this way, memories are both formed and recalled as a multi-sensory activity and can link an individual's inner world of experience to an exterior world. This can be supportive to a holistic consideration of the whole context and is highlighted in this research through links parents make between past, present, and an identified ongoing potential for the future. This is particularly highlighted in this example, in which there is an absence of such memories from childhood, and in relation to which present activity can operate in compensatory ways.

Mum of Aisha (3 years) and Nathan (5 years):

"The world was just there, and I was trying to find my fit – until I had kids. Everything I do is new, and I get to share it with my own children. I'm just as excited because I haven't seen it before – but then I've got to try to be the grown up one, whereas sometimes I feel more like one of the kids. I didn't really do it when I was younger, so for me, it's an even better experience to have that now. I'm learning nature now with them."

This parent's comment perhaps highlights the value identified from a contemporary childhood studies perspective of a more fluid consideration of adults and children as "interdependent beings who are also always in the process of 'being' and 'becoming' with one another" (Lee, 2002, in Uprichard, 2008, p. 7). This is also supported by a holistic perspective and expressed both as a call to live with our children, and the potential for an integration of our experiential capacities over place and time.

A conscious valuing of shared family experiences could be recognised in parent comments that indicated a strong motivation for 'making memories' with their children. These were identified as important for both parents and children to take into their futures and highlights an awareness of the significance of such moments for their 'inner worlds'. This is perhaps interesting to consider in relation to a potential transition between time's 'irruption' and 'concretion' in which qualities of time come to be appreciated for what they hold.

Dad of Tom (3 years) and Sara (6 years):

"We're very big on memories, that's why we do the holiday trips as well...giving us lots of them, and them".

Mum of Aisha (3 years) and Nathan (5 years):

"You just want to give them like the best memories. I just want my kids to look back and think they had the best time ever. Going out is a bonding experience and I get to keep that forever".

The ubiquity of digital media can support the potential for 'making memories and its role in family life was clearly evidenced on pre-school trips when parents took lots of photos. Sensory ethnography seeks to engage reflexively with these conditions, and to consider its impact within its own practices. The use of the Go-ProTM represented a contrast to family camera-use as it captured memories in a less structured way. The resulting images were not framed by an adult perspective and did not feature images of children, and parents' interest in having a copy of them could be mixed. During the reflective process, some parents chose to share their own photos taken during Go-ProTM filming, as they felt these gave a better indication of the memories made. An interesting contrast was perhaps highlighted by parents who identified a value in the research for seeing the world from their child's point of view. This was identified as holding the potential to influence their future shared outdoor activity.

Mum of Lucy (3 years) and |Becky (6 years):

"It reminds me of being that age. I feel I've learned a lot by seeing it from her point of view. I want to take that forward, and I want to go out again with her..."
"I just want to see it from her point of view – a bit like there – I tend to walk down the park a bit with blinkers on – but to really engage with it all and learn with her sort of thing."

Mum of Noah (aged 4):

"It's an insight into his world. Yeah – its lovely, lovely. Seeing all this is lovely actually, because you don't often get that insight...into that time of playing. Even when he's twenty – I can show him "Look, we used to play together you know. You think I'm a nagging mother now, but look, you used to like me". So, it would be a nice thing to have".

Dad of Tom (3 years) and Sara (6 years):

"It brings me back to being a child again – and everything's bigger".

These comments illuminate not only the potential to see from their child's perspective and a desire for this to inform current activity, but also a reconnection with their own childhood experience and the potential for intrapersonal as well as interpersonal influence. These dimensions of influence will not be considered here deeply as they represent a whole further aspect of experience that warrants the potential for further research. However, here will be highlighted as indicating the full dimensions that a holistic perspective attends to, and its significance in relation to the influence between child, adult and natural environment.

9.6 Educational Support for Holistic or Integral Relations

This research has explored the contemporary contribution of holistic educational principles and might be considered in terms of its potential to work within conditions of time's 'irruption'. Practice promoting the value in connective environmental and social relations can support individuals in coming together and carving out time to share in outdoor community play together. This might be considered beneficial not only for children but adults alongside them, through promoting conditions in which to experience time's 'concretion' in shared moments. A contemporary context characterised by planetary scale problems is identified as calling upon a need for our whole human potential and can be understood as supported by our ongoing relational experiences (Johnson, 2018, Yiangou, 2017). The vocabulary of consciousness structures highlights all contextual elements as relationally significant, and that there is a meeting of their expression between individuals and whole cultures. The relevance of the multi-layered nature of this relational context can be seen in the following parent reflections on preschool trips. These serve to illustrate the potential significance of trips to families, along with the experience of some associated challenges.

Mum of Lucy (3 years) and Becky (6 years):

"It's all very well – you can learn things in the classroom – but I think going out of the classroom – you can learn about nature in the classroom – but to be out in nature to listen to feel...is a completely different way of learning. I think you learn so much more outside the classroom – it's vital really...and to interact with the whole group outside the school is another way of learning. And as a parent on a school trip to see your child learning adds another level... to see what she does."

Dad of |Tom (3 years) and Sara (6 years):

"He really enjoyed it. He was very excited because we told him about where he was going beforehand...but he really enjoyed it. He's still talking about it now, about going on the school trip. He's very keen on school anyway, so he enjoyed the association of doing something with the school. I really enjoyed it as well. Took time off to go – 'cause I'm very into seeing what he does.... And doing everything on the trip. Harry enjoyed the activity and being there, being outside. If it was done indoors...it wouldn't be so...it opens up new opportunities. Exploring, his senses, interaction with everything"

Dad of Jack (4 years) and Starla (6 years):

"Been to all the pre-school trips bar one. I think they're good...can't speak for other parents. If they'd been more regular, I'd have tried to go to them more. It's good for the kids and gets them out of the same environment as well. I think it should be encouraged – for both kids and parents to be more social and make new friends and stuff. Honestly so many people are so shy and struggle with making conversation... I think it's quite a big issue".

Mum of Noah (4 years):

"We have been there before. It's good that you were there with the camera as we were getting a bit bored. We knew that you couldn't go down that section so were a bit ..." Hmmmmmm" There's not a lot to do there – just the pond and the pottery – so it's an only if you're passing through kind of thing...yeah..."

Mum of Aisha (3 years) and Nathan (5 years):

"It's schools – you've gotta behave yourself a bit. If they're doing things sometimes you feel you can't really speak to your kids how you would sometimes. If you see someone shout at their kids in the street it looks like a trampish move – you know what people think. It doesn't look nice. I'm quite funny about who I meet. I find it really difficult. I'm just too busy. I've got friends and family."

These comments can be considered in relation to barriers to child and nature contact that such trips might seek to address (Soga *et al.*, 2018). Such activity can promote contact with green spaces and social connection and was valued by these parents even with some associated challenges. Above all, this might be considered as practice that promotes the significance of these relations, and through this their potential to be strengthened in support of child and whole relational context. As the comments highlight, this activity could promote a greater connection to the wider context through stepping outside of the preschool premises. Some parents purposefully took time out of work or wider commitments to take part in these, highlighting the significance of this activity in their life context. Parent comments suggest that such trips could be enlivening through their description as 'vital', exciting and offering new opportunities. This was particularly facilitated by the nature of the environments visited which could offer embodied ways of learning through exploration, multi-sensory engagement and described here as "a completely different way of learning".

There are challenges and difficulties to Early Years Education in facilitating such trips, due to tightening budgets, educational pressures and working parent agendas. However, as this example demonstrates, it is possible for an ordinary preschool without any additional support to offer this, through a creative approach to problem-solving and a valuing of what such trips can offer. It is the valuing that is the key shift and here this has been promoted by seeing the significance in the whole relational context (The Froebel Trust, 2021). From a holistic perspective this can be understood in terms of the potential to promote a connectivity between part and whole, and the potential for holistic educational practice to support whole individuals in whole relations (Mahmoudi *et al.*, 2012). This can seem remote and irrelevant within current educational practice, but as the

potential for a paradigm shift indicates, this might call for a 'leap' out of current understandings, and a lean into the potential for a more "sympathetic presence with the world" (Johnson, 2019, loc. 1785). Such a shift might be considered in terms of our potential for fuller, richer relations with surroundings, and for children and adults to share moments of experience in which these can be formed.

From a holistic perspective, such trips can offer an accessible means for addressing both immediate and remote cultural impacts. To promote the importance of local connection through educational practice that offers seeds of ideas, builds familiarity with place and connections with people (Witt, 2017). Such activity can mark the passing of the school year in relation to its wider context and offer adults an opportunity to share with children in not only knowing but finding out together. This can be understood as a source of nurture to relations with the broader context, underpinned by a turn in the quality of selfother relations through which these can arise. Such an approach can be framed as idealistic but might also be considered in terms of a more brutal question about human responsibility. These are accessible means and approaches, and to continue to accept 'dulled' or 'extinct' relations as good enough represents a choice too. There are new ontologies that promote the validity of this and encourage a boldness in learning to dance with systems (Meadows, 2001), to understand our human co-creative role and to make space for enchantment in which we experience our shared nature "as concrete magic" (Curry, 2019, p. 91). These will be shared in the concluding chapter and offer compelling arguments that may address a deep contemporary need. This is to pay attention to our felt experiences in the world and their potential to promote our courage to care or fight for it.

9.7 Summary

Integral consciousness can be understood as the potential for an individual to experience connection to the whole of which they are part. The path for this lies in the capacities of whole individuals and the potential these offer for whole relations. Central to these relations is an inner sense of self and exterior world, and this is the basis through which the human 'part' is connected to the whole. The inner 'world' of an individual can carry influence across place and time, and through this act as a site of experiential integration. In this way, there is scope for an individual's experience to be accumulated into a

presence, and the suggestion of the evolution of consciousness is that this can involve an experience of being here and being now. Consideration of this as a potential state calls attention to a transitional process, and this can be considered in relation to this research. The transition is described according to time's 'irruption' and time's 'concretion' and can frame a consideration of the conditions currently situating children and adults in shared outdoor experiences. This research has explored what is illuminated through use of a holistic lens and has demonstrated its potential for identifying holistic dimensions of experience. This perspective offers a different set of values through which to consider our daily lives and the potential to illuminate impacts from prevailing cultures and what these might obscure. A transition into integral consciousness is suggested to involve a need to lean into this vision and the potential to discern experiential 'lines of flight' (Ingold, 2008) from within the fabric of given conditions. This is accompanied by a parallel need to leap out of present certainties, and the potential offered by this shift will be considered in the final chapter in its review of the research question.

10 What Can a Holistic Perspective Contribute to Our Understanding of the Influential Relations Between Young Children, Adults and a Natural Environment?

10.1 Introduction

This chapter reflects on insights from this research process and the ways these address the research question. The research has involved an exploration of a holistic perspective understood as an orientation to a vision of the whole and its connective parts. A holistic vision can align with contemporary planetary agendas and wider perspectival turns that are conceiving of life in whole terms and identifying our ways of knowing as significant within this (Sanderson et al., 2018, Taylor & Pacini-Ketchabaw, 2015). The contribution of Froebelian philosophy lies in its understanding of child, adult and natural environment relations as a source of potential balance. This can be considered in terms of humanenvironment relations that are in continuity and children as a source of revival to adult experience within this. A multi-dimensional conception of relations can be difficult to engage with in writing but enables contemplation of our own holistic capacities as means to connect immediate experience with whole planetary context. Such a shift in perspective may offer a valuable contemporary contribution through its alignment with sustainability thinking and the significance in acting local but thinking global (see section 3.2). A holistic perspective highlights an accessible path to change in human-environment relations that lies in daily experience (Mahmoudi et al., 2012) and educational guidance to support this in familiar early years educational principles (Brehony, 2009, Prochner, 2017). New research methodologies such as sensory ethnography can offer tools for its exploration, by giving value to our fullest capacities for knowing and demonstrating new routes to knowledge (Pink, 2009). A biographical reflection at the end of this chapter highlights the significance of my own whole ways of knowing in this research and the potential this has offered in illuminating new exploratory paths. The original contribution offered by this thesis includes:

- Contemporary insight into Froebel's Philosophy of Unity
- Understanding of its interpretation as Froebelian pedagogy.
- The use of sensory ethnography for its empirical exploration.

10.2 What Does a Holistic Perspective Offer?

The holistic perspectives considered in this research represent spiritual conceptions of life, and these have been described as broad, universal and offer a "meaningful engagement with the big questions" (Yiangou, 2017, p. 427). The word 'spiritual' can be conceived of as "a search for the sacred" (Pargamount, 1999) and this can be in association with a God, the divine or the transcendent, and that through association our worldly experiences can be considered as imbued with spirit. The evolutionary perspectives explored in this research offer a vision of human development in these terms. Gebser's theory maps this according to a deepening experience of human individuation through which there is then a potential to re-join the whole with a consciousness of its value. This can be considered to align with Froebel's perspective, as expressed in the following:

"Man, humanity in man, should...be looked upon not as perfectly developed, not as fixed and stationary, but as steadily and progressively growing, in a state of ever-living development, ever ascending from one stage of culture to another toward its aim which partakes of the infinite and eternal".

(Froebel, 1887, p. 17)

Influence from theories of human spiritual evolution is suggested to be "percolating into the cultural consciousness of our time" and offering the potential for "new ways of thinking about our place in history, and what our potential for future evolution might be" (Yiangou, 2017, p. 428). These perspectives frame current experience as a phase in human evolution and offer a map by which to explore new paths formed through our experiential relations. Holistic perspectives orient to a vision of the whole and its interconnected parts, and our whole human capacities as means to learn within this. A sense of self as an 'interior world' can be understood to sit at the centre of relations and form a continuity with those in an 'exterior world'. This is a human 'centre' that sits in parallel with the 'centre', source or 'origin' of life's expression and offers a means to consider our human experience as equally an expression of this. The theory of the evolution of consciousness offers a vocabulary to describe this relational richness and promotes understanding of this as a source of strength through connection with surroundings. The healthy function of the

whole is understood to rest on a dynamic balance of parts and is promoted through multidirectional influence across all its dimensions.

10.3 What can a Holistic Perspective offer within a Contemporary Context?

10.3.1 An Engagement with Planetary-Scale Problems

A holistic perspective can align with a contemporary sustainability agenda through its vision of the whole and connective relations. The contemporary era is characterised by recognition of planetary scale problems, and the role of human behaviour is identified in the naming of the Anthropocene (Crutzen and Stoermer, 2000). This highlights human activity as a dominant influence on the Earths' current bio-geophysical composition which is now demonstrating a need for change to that is sustaining to life. The Sustainable Development Goals identify converging crises to be addressed in poverty, inequality, climate change, environmental degradation, war and injustice (UN, 2020). A vision of sustainable development now calls upon a need for integrating social, economic and environmental needs (UN, 2020, Cabezas et al., 2004). Current global conditions are recognised as demonstrating a lack of human insight that makes us "mostly unwitting planetary citizens" (Montuori, 1999, p 297), and the naming of the Anthropocene as drawing attention to that which we are equally "responsible for, and mortally vulnerable to" (Taylor and Pacini-Ketchabaw, 2015, p. 510). Human insight into planetary-scale problems is accompanied by a growing capacity for planetary-scale culture as described in terms of "a Planetary Era, in which humans are linked on a small planet through communications systems" (Montuori, 1999, p. 297). Impact from this is having a 'relativizing' effect on world views that is starting to raise a challenge to dominant ways of knowing based on science and reason (Simard, 2021). This is highlighting the need for

> "a fundamental re-education which goes beyond the simple thought and dominator relations of the past which have become so habitual we take them to be the only ways humans can think and relate".

(Montuori, 1999, p. 311).

Instead, there is a need to question the "basic philosophical assumptions which underpin our every thought and action" and a crucial role to be played within this by our human creative capacities (Montuori, 1999, p. 311).

10.3.2 The Potential for Planetary-Scale Solutions

A cultural orientation to human-environment separation is expressed in social structures, processes and environments and impacts can be identified in global-scale problems and local experiences (Zylstra et al., 2009, Pyle, 1978). A holistic perspective offers a means to reconsider their interconnection according to an inner sense of self that sits at the centre of ongoing relations. The qualitative nature of individual experience can support either an open or defensive orientation and this can form foundations for all ongoing relations within a whole context (Chawla, 2002). This perspective essentially orients to a 'spherical' conception of human relations that emphasises a depth of connectivity between self and surroundings as its most significant dimension (see section 3.7.3.2). This sits in opposition to a linear conception that orients to the development of an 'individualised' life over time which can start to be considered as a significant 'whole' (Chung & Walsh, 2000). A holistic perspective frames our most immediate experience as connective to a whole context and therefore for this to form an accessible path to relational strength. Use of a holistic 'vocabulary' has facilitated consideration of relational depth and constitution, and through this, to be reminded of life's wholeness within our most immediate experiences. A focus on adult and child interactions has highlighted the potential for influence between them. This rests on a contrast between accumulated experience in adulthood that shapes a perception of surroundings as 'ordinary', but the potential to be reminded through children's fresh eyes of life's fundamental nature which can make this 'extraordinary' once more. Scope for relational shift can be considered relevant not only to individual lives but also in whole cultural terms and pertains to questions about our full human relational capacities and valued or validated ways of 'knowing'. A human capacity for rational abstraction can offer a seductive sense of control over surroundings, but this may be obstructing a deeper wisdom that lies within acknowledging an essential interconnection with surrounding life (Gebser, 1949, Zylstra et al., 2009, Gottlieb, 2012).

10.4 An Alignment with other Contemporary Perspectives

A holistic lens can align with other contemporary perspectives that are moving beyond a conceived separation between humanity and environment and towards that of an interconnected world. These offer ontologies of complex worldly conditions and epistemologies highlighting our full relational capacities within them. Such perspectives present a broadened identification of agentic forces at play, and these as means for connective human-environment relations. A key shift resides in a need for moving beyond an envisaged control over surroundings and towards a co-creation with them, and the identified significance of values operational within and through such relations. These perspectives have arisen in different disciplinary fields including the sciences and social sciences and are highlighting that an emphasis on the interconnected nature of life extends to our conceptions of it. A shift in the identification of life's constitution is suggested to call on a need for "a greater integration of human dimensions and capacities" (Montuori, 1999, p. 302), and this can align with a conceived potential for relational wholeness. Such views include the perspectival turns outlined in chapter two that have mapped out a broadening consideration of human and environment relations, but these have been developed in seeking ways to meaningfully inhabit this. These perspectival turns can align with holistic theories in their contemplation of child and nature relations through considering the status of our ways of knowing. A shift towards integration of our full relational capacities can start to influence the nature of solutions envisaged to a child and nature problem. This is through orienting to the connectivity in all relations and giving equal validity to the 'voice' of both child and environment alongside adult rational solutions. From the holistic perspectives considered in this research, it is this process that can start to support a relational embeddedness within our surroundings. These perspectival turns might be considered according to a paradigm shift in which humanity holds the potential for an integral consciousness, and through this, the scope for an experience of the whole through the self.

10.4.1 The Ecological Self and Nature Connectedness

The deep ecology perspective has identified the need for a change in the conception of the human-environment relationship in support of the healthy development of both. A

definition of this is offered in an 'ecological self' (Naess, 1988) understood as the human potential for self-actualisation through transcendence of the individuated "egoic" self, and arrival at an ecological self. Thereby the individual is understood as embedded within an 'ecommunity ecosphere' (Fox, 1990), and can give rise to environmentally responsible behaviour as a form of self-interest. The identified need to find impactful means for its establishment has worked in association with the concept of 'nature connectedness' (Schultz, 2002) to consider how the inclusion of nature as part of identity can be achieved. Nature connectedness is constituted by the cognitive, behavioural and affective components of an individual (Schultz, 2002), and research is building insight into the most effective 'pathways' to its establishment. Recent research identifies the significance of direct contact, emotion, meaning and compassion in establishing this state (Lumber et al., 2017), and therefore for 'nature connection' strategies to shift emphasis away from "abstractions of nature, the labels of the wildlife people might identify" and towards "the emotions people might feel; prompt reflection on the beauty and meaning they find; or suggest the senses they can use to explore this home for nature" (Lumber et al., 2017, p. 1). This view aligns with a holistic perspective in its identification of the significance of our whole capacities in forming relations, however the difference resides in a holistic vision of their essential integration. Such considerations might be applied within our processes of seeking solutions, and for these also to move beyond prioritising rational capacities and a 'measures' approach.

10.4.2 Social Sciences

10.4.2.1 The Post-Human Perspective

Developments in post-human thought mark a shift in attention towards the "interconnectedness of the human and more-than-human world" (Taylor, 2011, p. 432). This view engages with a more democratic consideration of "the fragility and porosity of all matter and objects" (Malone, 2018, p. 196) and promotes new epistemologies as "alternative ways for knowing and enlivening "multiple ecologies of belonging"" (Malone, 2016, p. 7). New concepts are established in pursuit of this and include notions such as 'intra-action' to describe the existence of all life material as "agential entities flowing in a space-time continuum" (Barad, 2007), and objects as 'in-phenomena' and produced through a series of entangled relational possibilities. It has also been suggested that the notion of 'bodies' can be loosened from prior understandings, and be considered

essentially inclusive to the "material, semiotic, social and incorporeal" (Deleuze, in Harker, 2005, p. 57). A conceived continuity in life materials and processes has given rise to their consideration in terms of a sense of their 'sacredness'. Braidotti has drawn upon the ancient Greek concept of 'zoe' which considers all life materials as imbued with vitality, and the universe as one infinite and indivisible "dynamic, self-organizing structure" (Braidotti, 2013, p. 60). This concept is used in promoting a zoe-centric worldview, as an ethical model that values this life force centrally and can thereby displace the human. It is suggested that it is this monistic understanding of the universe that allows for development of a new understanding of the individual, as expressed in the following:

"There is a direct connection between monism, the general unity of all matter and post-anthropocentrism as a general frame for reference for contemporary subjectivity".

(Braidotti, 2013, p. 57).

These conceptual shifts are contributing both to a vision of more holistic relations and seeking ways to reorient our lives to them. However, implicit to this may be a need to depart from a status associated with a capacity to conceptualize relations and to give greater emphasis to promoting our means for enacting them. Such a perspective implicates a need to attend to the materials and relations of our world and to enable their 'voices' to be heard in ways that might by-pass our concepts.

10.4.2.2 The Disenchantment and Re-enchantment of the World

The social sciences have attended to operational meta-narratives or paradigms and their cultural effects. From this perspective there has been identification of the world having been 'disenchanted' through the effects of capitalism (Weber, 1918). Such an effect has occurred through a cultural belief that "there are no mysterious incalculable forces that come into play, but rather that one can, in principle, master all things by calculation" (Weber, 1919, in Gerth and Wright-Mills, 1946, p. 139). An ongoing process is identified as having occurred through numerous realms:

"The sciences dispelled the realm of mystery; the prose of reason hushed the poetry of superstition; greed and calculation fostered callous disregard for the earth and the bonds of community".

(McCarraher, 2019, p. 1).

However, despite consciousness of these effects a continuity is retained with its operation and includes the social sciences in their mode of critical engagement. Disenchantment is understood as having historically replaced the dominant structures of religion through which humanity channelled a spiritual belief and sense of collective identity. Through this there has been a cultural transition away from an 'enchanted' world and an ontology fused with ethics that imbued the metaphysical composition of the world. Instead, capitalism has evacuated sacredness from material objects and social relationships through their commodification for profit. As a process this has influenced human experience through development of a "buffered self" (Taylor, 2007) that "insulates the inner from the outer world" through preclusion of any sense of the numinous in surrounding life (McCarraher, 2019, loc. 279). Parallels can be drawn between the notion of enchantment and sacralisation, and that "without faith in the sacramental nature of the world, we anchor ourselves in the illusory and inevitably malevolent apparatus of domination" (McCarraher, 2019, loc. 365). It is this meaningful disconnection between individual and surroundings that has been problematic and led to the need for a 'reenchantment' or sacralisation of the world (McCarraher, 2019, Curry, 2019, Bennett, 2002). The potential for re-enchantment can frame consideration of a holistic perspective as basis for a paradigm shift in addressing contemporary challenges.

To re-establish an enchanted world, it is important to understand what this is and how it might occur and lay the grounds for an associated epistemology. Contributions to thought on the contemporary role of enchantment have been drawn here from McCarraher (2019), Curry (2019) and Bennett (2002), and these outline a means for such a 'way of knowing' to be recognised. In opposition to a process of disenchantment, our enchantment has been defined primarily as an experience of awe and wonder and alludes to a sense of this arising through means beyond human control. Such experience calls upon a need to respect its integrity as expressed through moments of "pure presence" beyond space and time (Bennett, 2002, loc. 240). This requires not knowing but instead being guided by

experience and often calls upon acute sensory activity. Enchantment therefore happens through worldly circumstances saturated with meaning and demonstrates a potential to cross boundaries that render them permeable. Such encounters are described as giving rise to a sense of being charmed and "a slightly off-putting sense of having been disrupted" (Bennett, 2002, loc. 2423). It is these qualities of experience that have been suggested to offer a "return to childlike excitement about life" (Curry, 2019, loc. 240) and a "momentary return to childhood joie de vivre" (Bennett, 2002, loc. 2423). Such views align with the holistic theories explored in this research and the potential to re-integrate our capacities for a childlike experience of the world. Relevant moments might include contemplating birds as friends, searching for one's fears in the shape of a wolf in the woods or experiencing a joy and freedom in our movement. Engagement with such qualities might also be gained through sharing in a child's point of view through which a scruffy dip in the park appears as a sea of grass bathed in light, or puddle, worn path or open space as a means for an adventure. These experiential qualities are identified as important for a sense of attachment, for relationship with other and for affirming and enriching a sense of self. The potential for enchantment is therefore promoted as central to an ethics of care, and that such experiences can stimulate the emotional energy and perceptual attention to surroundings required for following moral codes (Bennett, 2002). However, such experiences cannot be manufactured, and instead involve the potential to be responsive to their occurrence. Such understanding essentially acknowledges the agency of life beyond human control and its capacity to exert impact if we allow it. It is possible to create conditions that can enable or support the potential for this to occur, and enchantment holds associations with elements of the 'wild' in nature, art, learning through play, religion, science and love. Indeed, perhaps also through shared experiences with children that enable such qualities to be experienced within our ordinary day-to-day life.

Identification of the need for re-enchantment gives rise to a consideration that it is not the world that has been disenchanted, but humanity. If enchantment is discerned as a potential in the world, then this might be highlighting the limits of modernity and an associated dominance of rationality that can "reduce what actually presents itself to something else supposedly more important, and therefore more valuable and interesting" (Curry, 2019, p. 89). It is our culture that influences our potential to discern and therefore experience enchantment and this therefore represents a crisis of values (McCarraher, 2019, Blackie, 2018). Therefore, to engage with the value of 'enchantment' requires addressing the

ontological roots to "loosen the hold of the disenchantment tale" and notice experience anomalous to a world understood to be "wonder-disabled" (Bennett, 2002, loc. 1976). This understanding might be considered in relation to a holistic understanding of the experiential depths offered by any moment that can connect us to the whole in fundamental ways. Such a view also aligns with other perspectives seeking to become more conscious of our human capacity to co-create with surroundings and are seeking ways to live into this transition. Enchantment can be understood as our human capacity to 'story' these relations, and that this is our "concrete magic" (Curry, 2019, p. 91). Such a transition might feel like a radical shift for the slow-turning wheels of societal structures and mass cultures but is apparently quite a simple observation for a seven-year-old who identifies that "our magic comes right up from our heart". As humans we story, and what is called for is an expanded awareness of its forms, and more importantly its effects (Haraway, 2016). The recent perspectival turns outlined here in the social sciences and ecology are identifying the significance in our potential to re-story at cultural scale. A process is involved in which there is a revaluing of our relational capacities and what these can promote. Through this there may lay the potential to identify a significance in learning to 'live with our children'.

10.5 What Does a Holistic Perspective Contribute to Our Understanding of Child, Adult and Natural Environment Relations?

A holistic perspective can offer illumination of:

- Child and adult shared experiences of the world as a source of relational vitality.
- Our full human capacities as means to embed the individual within a sense of life's wholeness.
- The potential for immediate experience to be connective with conditions at whole or global scale.

10.5.1 A Froebelian Holistic Educational Paradigm

This research has explored the contemporary contribution of Froebelian holistic pedagogy due to an understanding that children and adults now share more outdoor experiences together. Froebelian pedagogy orients to a vision of the whole in the law of unity, parts in the law of opposites and identifies a significance in our potential to find their interconnection. Human life within this can be understood according to a "state of living development" (Froebel, 1887, p. 17) and frames one's "own life and that of others at all its stages as a continuous whole" (Froebel, 1887, p. 41). From this perspective there is an outlining of two significant realms of human experience in the individual as the "events of his own development, the history of his own heart, of his own feelings and thoughts" (Froebel, 1887, p. 41) and in surroundings in which "there is repeated the history of the creation and development of all things" (Froebel, 1887, p. 40). Froebelian pedagogy supports the making of connections across these realms of experience through means expressed within its enduring educational principles. This includes highlighting the significance of the whole relational context between child, family, community, nature, culture and society, and the potential to learn through difference by a respect for the integrity of childhood in its own right (The Froebel Trust, 2020). The central principle of learning across difference in whole relations lies in the potential to "learn to understand others" and "only in this way can parents hope to understand their child" (Froebel, 1887, p. 41). These principles underpin pedagogical relations in which the adult can gain insight through the rejuvenation offered by a child's perspective while a child gains from adult experience. This holistic understanding is expressed in the following appeal:

"Let us impart life to ourselves, to our children; let us through them give meaning to our speech and life to the things about us! Let us live with them, and let them live with us; thus, shall we obtain from them what we all need."

(Froebel, 1889, p. 88)

A vision of a developing whole is described of which we are a part, and is continuous, ever renewing and therefore alive. Such a vision is juxtaposed to a prevailing understanding of development which orients to the individualised life of a child to which adults can foresee developmental goals to be achieved (Chung & Walsh, 2000, DfE, 2020). The latter approach is oriented to the potential for a control of outcomes, and the former to a relational richness within which we all live and evolve. It is this potential for a shift in educational paradigm that has been explored in this research along with its relational effects. Reflections on this are derived from research findings including parent

discussion that highlighted the significance of education in a broad consideration of contexts and relations. The significance of interconnections was demonstrated at the onset of this empirical engagement and highlighted in those between an Early Years setting, families and their situating environment. In my role as researcher, this then led me to explore activity beyond educational settings and the cultural influences that play out through them and engage with that which occurred in family and community contexts.

10.5.2 The Significance of the Natural Environment

The research has explored educational practice that seeks to engage with the whole relational context relevant to the child. This practice has sought to promote access to natural environments and community connections, and this has been in response to an identified disconnection in these relations (See Chapter 2). Reflections from parents indicated that they valued this opportunity for involvement in children's educational experiences. The occurrence of this outside the early years setting was identified as significant due to the broadened scope of activity that could be offered. Although the preschool staff provided some facilitative activity during trips, moving outside the usual educational setting turned all children and adults into explorers together. This shift enabled engagement not only with a new environment, but one not designed for educational purpose. Instead, the opportunity was offered for direct contact with surroundings that might be considered more 'natural'. The holistic significance of this can be contemplated in terms of the "pure inner life it shows, harmonious in all parts and features" (Froebel, 1887, p. 9), and educational activity promoting contact with this is expressed in the following comment:

"man who roamest through garden and field, through meadow and grove, why dost thou close thy mind to the silent teaching of nature?"

(Froebel, 1887, p. 8)

A seemingly quite simple act of a local outing can thereby be reframed in terms of the potential for a more profound holistic significance. A greater relational depth might be understood as promoted through engaging with the more-than-human world and attending to what it may offer beyond the dimension of words. This act offers scope for a surrender

to a wider agency expressive through surroundings, and an openness to what we might learn there. A reorientation is enabled away from what we already 'know' and instead to what we might find out, and this is through children and adults engaging in this together.

10.5.3 The Significance of a Child's Relations

The child as focus on pre-school trips represented a strong motivator to parent involvement through an interest in gaining insight into their child's educational experiences. The opportunity for a shared adult and child experience can also be considered to offer a significant opportunity in holistic educational terms. This is through taking adults and children into the world to share parallel experiences in which there is the potential for influence between them. The young child might be considered an expert in exploring the world at close-range, and can bring an active physical engagement, a curiosity about novel experiences and fresh ideas that awaken adult perceptions alongside them. This potential for novelty and enlivenment can be considered to occur both in moments of shared experience, but also in ongoing education through engagement, connection and integration of the broad relational contexts supportive to life. The significance of a balance in educational activity between in-setting routines and connections with broader contexts is a challenge for contemporary early years education. There is the potential within continuing service pressures for daily activity to crystallize into manageable routines. However, there is perhaps a great loss for us all in this that can be considered in terms of the following description:

"Our discourses in social life, are dull, are empty husks, lifeless puppets, worthless chips; they are devoid of inner life and meaning; they are evil spirits, for they have neither body nor substance".

(Froebel, 1887, p. 88)

The suggestion of an 'evil spirit' makes for challenging contemporary reading but might be considered in terms of disfunction, imbalance or ill-health. Striking a balance between routine and stimulation might be more challenging in a contemporary context as opposed to that of a rural kindergarten in 1837. However, it is the notion of 'living development' that offers means to highlight a value in relational depth and balance, and a vitality promoted in day-to-day relations and the experiences these promote. This pedagogy

highlights the potential for this quality to be enlivened through shared experiences of natural environments and the relational qualities that children can bring. Although these shifts may seem subtle, it may be fundamentally and wholly important that our suburban life is imbued with a sense of aliveness in its surroundings. A holistic paradigm orients to a question of values and involves a shift from the potential prospects of individuals to the relational strength of the whole. Despite this being a fundamental question permeating the whole social and cultural context, this also remains a quality that can be accessed moment to moment. It involves placing value on our qualitative depths of experience and an understanding that these can be impactful for all relations, not just those stretching into an individual's future. A state of 'living development' can be considered as supported through activity promoting connectivity as foundations for relational strength, education as life-long learning across all contexts and a holistic importance to appreciating the young child and family "as a unit" (Froebel, 1887). The child at the centre of these relations is subject to influence on their development but can also be understood as positively influential on wider life too (Froebel, 1887). It is together that these ongoing processes can be considered as offering the grounds for our continuous rejuvenation, resilience or sense of vitality.

10.5.4 The Potential for Re-Connective Relations

The contemporary significance of this educational activity can be contemplated in relation to barriers identified to the child and nature relationship. These are recognized in the environments that families live in, their time-use within these and its impact on the qualitative experience of surrounding life (Pyle, 1978). From a holistic perspective these conditions can be understood as significant in forming relations between individual and whole and makes local experience as significant as abstract knowledge in shaping planetary relations. The individual's 'inner world' of experience can be understood as interconnected with the whole, and for this therefore to represent an important site of impact in addressing whole relations. The language of consciousness structures offers a means to consider how such holistic relations are formed, and this can be considered in terms of a suggestion that "every way of being makes a significant contribution to the wisdom needed to solve our contemporary environmental crisis" (Chawla, 2002, loc. 2771). It can be considered that it is a loss of insight into the value of experience that continues to contribute both to planetary scale problems and local conditions (Pyle, 1978).

A holistic vocabulary can promote an understanding of our own relational capacities, and the significance of a sensory immersion in the world "in an unthreatened way that encourages a bond of connection rather than fear" (Chawla, 2002, loc. 2677). It is these conditions that can enable an experience of the dynamic relations between one's "unique separateness and identity, and also a continuity, a renewal with nature as process" (Cobb, 1959, p. 539). It is also these conditions that can also enable the development of an emotional association with place through metaphorical thinking that can "invest the landscape itself with mythic significance" (Chawla, 2002, loc. 2749). A holistic perspective highlights these qualities as being of equal value to our rational capacities in forming a relational strength, and that it is

"When we are grounded in the consciousness of our body with a sense of basic trust and security, we are enabled to accept identity with the world as the genesis of wisdom".

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(Chawla, 2002, loc. 2742)
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In some respects, this aligns with a call for a more progressive sense of place fitting to contemporary challenges:

"A sense of place, an understanding of 'its character', which can only be constructed by linking that place to places beyond. A progressive sense of place would recognize that, without being threatened by it. What we need, it seems to me, is a global sense of the local, a global sense of place."

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(Massey, 1991, p. 8)
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A holistic world view offers a perspective that can support this global sense of place through the sacred, and an understanding that this rests on the integration of our whole human capacities in connection with the whole relational qualities of surroundings (Mahmoudi *et al.*, 2012). Educational activity promoting social connection and direct contact with natural environments can be understood as participation in a state of living development that promotes a relational strength that can aid us in individual responsibilities (Froebel, 1887). Belief in such values can be framed as idealistic or as attached to a world view resting on personal choice. However, outlining its significance

as a paradigm shift highlights this as the collective responsibility of the whole (Gottlieb, 2012). It is an understanding of our personal experiences as a connective pathway to the whole and thereby planetary health that can shift this from a question of personal to collective responsibility.

10.5.5 How Might We Enact Co-Constructive Relations?

The insights offered into influential relations between young children, adults and natural environments have occurred in moments of fleeting experience and highlighting these can raise questions about their potential for effect. Questions might consider impact on adults from an engagement with children's perspective over time. How might such moments occur in family or educational contexts, and might there be any demonstrable impacts on wider relations? Overall, what might be the measurable impact of this research, and how might it be used to effect change? Indeed, does this offer an effective basis by which to establish a much-needed model for sustainability education? However, there is a careful balance to be achieved in exploring the potential for a paradigm shift, and an associated need to move beyond current measures for success. Engaging with a holistic perspective involves seeking to acknowledge that our human capacity for control over surrounding conditions has limits (Gottlieb, 2012). This offers a route through which to engage with a greater relational strength arising through openness to possibility and the potential for a new validity that arises when we "pay attention, here and now, to come what may" (Curry, 2019, p. 16). An appropriate focus for future research might therefore lie in the effect of a shift in values, and what is promoted through a reprioritisation of connective relations. Such a focus has been considered here in relation to values promoted through holistic educational practices and the potential to explore influential relations through use of a holistic lens.

10.5.6 Ways of Knowing and Routes to Knowledge

This research has engaged with considering ways of knowing and the potential for new routes to knowledge (Pink, 2009). Such questions are situated by the social conditions in which they occur and power inequalities that play out through them. Engagement in such questions is contextualised by historical processes playing out as cultural values at global

scale, and for the vastness of this global context to frame our individual experiences (Brehony, 2009). A holistic perspective highlights the interconnection between the individuals' inner world and the broad, complex nature of this whole context, but the potential for an influence to be exerted in either direction in these relations (Froebel, 1887, Gebser, 1949). Such considerations raise fundamental questions about how we can know what we know, who tells us and how we are convinced? Perhaps also the potential for questions about what can be known in immediate experiences that are dismissed within broad cultural contexts? Engaging in such questions opens scope for our experiences to be understood differently, and for there to be scope for shift within the nature of our perceptions.

10.5.7 Children as Experts in Sensory Knowing

Sensory ethnography has offered an opportunity to explore sensory knowing, and to consider both what this might be and what it can offer. This methodological framework explicitly seeks to attend to our full sensory capacities, consider what this might include and what they can convey. Such a perspective therefore offers a critical engagement with culturally situated understandings of knowledge and engages with the potential for different ways to illuminate insights. The use of Go-ProsTM in this research has enabled an exploration of what children might potentially teach adults about this, and to engage in "living with" children by closely sharing in their experiences of surroundings. This act emphatically places a value on children's perspectives and offers an opportunity to adults, and this in the humility to let go of rational ways of 'knowing' and engage instead with possibility. Through the research process this has come to be considered in terms of an engagement with our whole human capacities and giving value to the knowledge offered through physical immersion in surroundings in which we can experience our own creative capacity. Sensory ethnography seeks to raise the status of sensory knowing, and perhaps through research such as this, children as experts. In this respect, children might be considered as gatekeepers to adults, and to not only illuminate that which is important for children but that equally important to adults too. Such considerations can align with a description of the child as "indicator species" for sustainable city life, as an understanding that what is good for children is indicative of that good for wider life too (Gill, 2020, ARUP, 2020). However, this research has taken that notion one step further by taking seriously children's ways of knowing within this and questioning if this can also contribute to the wider healthy life of the whole. What might adults be reminded of through children's perspectives and ways of knowing that are experientially important but forgotten, unattended to or devalued (Rautio, 2014)? Such insights might be understood as good for children as a measure of that good for wider life through consideration of relational strength as foundations for a healthy whole.

10.6 The Limitations and Future Potential of this Research

10.6.1 Limitations of the Research

The unfolding of research through empirical engagement and methodological exploration gave rise to a process deviating from that envisaged at the outset. This discovery process gave rise to illuminative findings, but reflection on this highlights the limitations of this research and scope for its future potential or next steps.

Limitations:

- A small sample size of self-selecting research participants has given rise to a limited representation of children's home contexts and cultural backgrounds.
- There may have been a missed opportunity in the use of child and adultworn Go-ProsTM as parallel data sources.
- The 'vocabulary of holistic relations' may have offered deeper insight into multi-sensory depths of shared experiences in parent interviews.
- There was scope for a more explicit focus on interconnected sensory experiences in the viewing of Go-ProTM footage in parent interviews.

The research findings were based on participants that had chosen to attend pre-school trips to natural environments and were happy to take part in activity exploring family interactions. This holds questions about how representative this might be of wider family, home or care contexts and highlights current challenges to be considered in relation to inequalities in children's access to natural environments (DEFRA, 2018). This raises questions about shared outdoor experiences between children and adults in care relations, or in relation to influential cultural issues that can play out through lived social and environmental experiences. There is a country park near to this preschool which much

of the data was captured at, and this also holds questions about the qualities offered by this suburban context that might not be accessible in other locations. A broader sample size or exploration of this focus within a widder context could have enhanced the representation of such issues within the sample set. The capturing of footage from a child's perspective sought to engage with valuing child-led relations as promoted by Froebel. However, there may have been a missed opportunity in using parallel child and adult-worn Go-ProTM cameras for capturing two perspectival sources as a basis for comparison. A question arises about what adult-worn Go-Pros™ might have illuminated about their shared experiences in the moment, and indeed, whether there is scope to invite a young child's engagement with this. A short exploration of children's video viewing in the pilot study suggested that such activity would need to be carefully structured to engage attention. Go-ProTM footage can lack an on-screen subject and this can make challenging viewing compared to traditional engagement with this medium. When considering processes involved in sensory elicitation interviews, I now see though building familiarity with the vocabulary of holistic relations a greater scope for engagement with its terms in reflective interviews with parents. This might have offered a more conscious valuing of holistic relations in exploring this research question and illuminated the multidimensional depths within any single experience. The interviews could also have engaged more deeply with the western five-sense sensorium during video reflection and there is literature associated with the 'sensory turn' to draw upon in shaping such verbal and non-verbal interview processes (Pink, 2009, Harris & Guillemin, 2012). Such activity can align with the interests of new methodologies such as sensory ethnography, in exploring the potential for giving validity to new ways of knowing and what these can offer.

10.6.2 Next Steps in Research

This research has explored new paths in the potential offered by sensory ethnography for engaging with a holistic perspective. This has unfolded through the research process and offers a starting place for further investigations. Next steps for research include the following suggestions, and the potential offered through comparisons between contrasts and the potential for making connections across them (Froebel, 1887).

Next steps:

- A comparison of relations between young children, adults and natural environments in different global contexts and their cultural and environmental conditions.
- Use of a vocabulary of holistic relations for engaging with participants understood in terms of a diversity of abilities, disabilities or conditions.
- A comparison between Go-ProTM footage and photographs in the recording, recalling and 'making' of family memories.

A holistic perspective frames consideration of the child in relation to family, community, environment, culture and society, and thereby the pertinence of cross-cultural comparisons. The nexus of child, adult and environment relations can be explored in different situating geographies and human cultures and the ways in which these can shape family experiences of locations, journeys and activities. A cross-cultural comparison can highlight the potential for influence from local specificities but also offer grounds for considering what might unite across them. Such relations can be understood as simultaneously environmental and social, and the Go-ProTM has demonstrated its potential to be well-suited to exploring child-led insight in this regard. This has been through its capacity to be situated literally at the heart of intimate interactions between child, adult and environment, and through this to illuminate the experiential depths within daily moments. One aspect of this that appears little researched but to offer rich grounds for further exploration includes family use of familiar stories from home in forming relations with wider life. A holistic perspective can frame 'storying' in broad and inclusive terms that can consider intersections between whole cultural 'stories and the storying needs of the individual child (Bettelheim, 1998). This focus represents an accessible avenue for exploration as it is language-based and there is broad, relevant theory to draw upon (Bettelheim, 1998, Warner, 2014, Blackie, 2018). The storying of children and families in the localities in which they live is embodied and can offer scope for considering the significance of an associated 'placemaking' richness (Witt, 2017). It may also be particularly interesting to retain a focus on the differences between child and adult-led engagement as highlighted in this study (see Chapter 7). A small window of possibility has been opened in this research that offers rich grounds for further investigation. This is a gap in literature and offers grounds for further exploration that can align with a wider shift in questioning and revaluing multicultural routes to 'knowledge'

and its status (Marin & Bang, 2018, Taylor & Pacini-Ketchabaw, 2015, Montuori, 1999, Simard, 2021).

A limitation of this study lies in the range of ability or identified disability of participants, and the influence this might have in child, adult and natural environment interactions. As disability affects approximately 20% of the UK population (ONS, 2021), developing more inclusive next steps in research engagement is extremely important. The findings of this research might be considered to offer limited engagement with our full relational capacities and the ways in which these can be expressed in a diversity of ways. A holistic vocabulary can offer an inclusive perspective that values equally all ways of being, knowing and its embodied expression. Such a vocabulary can integrate the relational influence of non-verbal communication or sensory processing, and support consideration of what this might offer whole populations in holistic terms. This issue is particularly important in addressing current inequalities in children's access to natural environments associated with disability (Horton, 2017, Von Benzon, 2011). A further area highlighted through the research for exploration includes the preference some families demonstrated for their own photos over Go-ProTM footage. This was highlighted in interviews that could prompt parents to draw upon their photos in mobile phones and to use these as a basis for reflecting on their experiences. These photos tended to feature children or activities they had engaged in and can invite a consideration of 'memory-making' as a conscious activity. Questions might include what a difference in captured images can demonstrate about the feelings and identified value of such activity? Does such comparison offer scope for identifying what was seen, sensed or engaged with and what this might demonstrate about child or adult experiences or relations with surroundings? All such questions can be situated by consideration of holistic relations and the potential for balance in pursuit of a healthy whole. This is through a continuity of relations that can be connective and integrating across time in the lifespan of the individual and beyond. These considerations are well-served by the framing concepts of sensory ethnography in place, perception, knowing, memory and imagination (Pink, 2009), along with wider evolving perspectival turns seeking to explore the significance in our capacity for relational richness. The overall findings of this research might be considered according to the following broad conclusions which point to the potential for further investigation.

Conclusions:

- A holistic perspective can align with a current planetary agenda through a vision of the whole and ourselves within this according to our connective potential.
- It highlights accessible paths towards change within and through our current conditions.
- Sensory ethnography offers a methodology that capitalises on contemporary research tools for its empirical exploration.

10.7 A Biographical Reflection

10.7.1 Unity and Opposites

A reflection on the findings of this research leads back to my own biography, and the ways in which this has shaped the nature of my engagement with ideas. This feels like an immense task, and I find through the benefit of hindsight that I identify this in terms of opposite qualities and the ways in I have sought balance between them. A balance can be considered in relation to my own activity but with a strong sense of this in relation to wider conditions, in a partnership through which one can lead to another almost as a dance between self and surroundings. The question of balance is never-ending as life occurs through continuous change and can give rise to new priorities that become more pressing within given circumstances. Terms that I have engaged with such as 'living development' and 'dynamic balance' seem entirely fitting and highlight through opposition a surrounding culture that seems strongly oriented to its capacity for seeking a control of conditions. The role of balance can be understood as associated with the essentially compassionate nature of holism within which all activity forms part of the whole and has a role to play within this. Our human capacities for control can be understood as fitting to a large-scale organisation of activity and are significant in reaching the potential for a planetary culture. Its influence is therefore an important element in learning to be whole but represents an aspect to be integrated within our fuller potential. The analogy of dance is useful in considering one's individual experience as a source of information in parallel with an 'exterior world', and that a sense of separation between them gives rise to choices about how we resolve this. The opposites that I identify pertain to qualities of my

experience and surroundings and the relations explored in seeking a sense of connection between them.

10.7.2 Wilderness and City

Moving to the west of Ireland involved the pursuit of a quality-of-life elusive in cities and discovered in a sense of wildness in mountainous coasts and small populations. I experienced a restfulness in my physical being through living with space for the self to be felt and contrasted with city life that called upon negotiation of social systems at greater scale. A definition of wildness can be understood as "the physical environment to which we belong and the nature of relations this offers" (Cookson, 2011, p. 187) and can be considered in relation to the qualities of surroundings, one's inner world and their potential for interconnection. The quality of wildness therefore engages with

"An approach to life that spans two levels of organization, an internal arena that draws upon base natures and an external arena that self-organizes a quality that many find inspirational."

(Cookson, 2011, p. 188).

Wildness therefore represents a central issue I have explored biographically and now in this research in the potential effects of environments and the human responses they evoke. My experience is that it can be difficult to find balanced relations between self and surroundings and this is through their being constituted by both social and environmental conditions. Having children offers an opportunity to witness these relations in another, and in Ireland an example of this played out in their potential to move freely and explore space. My experience of this was not problematic though and gave rise to a difficulty in balancing what was good for my children with what was good for myself in parenting them, as issues that are inextricably tied together in families that are "as a unit". A compromise took shape in moving to the steady convenience of suburbia, which offered a manageable balance rather than moments of great beauty and social isolation. The question of balance becomes complex when understood as multi-dimensional, and maybe this can serve to highlight the significance of our holistic capacities in establishing this. My sense of this research is an engagement with the potential for a dilution of wildness, and how this can be considered in the environment, the self and their potential

interrelations. There is almost certainly a need for better balance, and this research strengthens a growing conviction it is one that children can relationally support.

10.7.3 Voice and Being Heard

The voice and being heard are opposites that convey a strong sense of their interrelatedness through an inherent reciprocity that suggests that one is rather pointless without the other. The imagery of listening is used to express a strong sense of humanenvironment interconnection in the magic consciousness structure (Gebser, 1949), and this is presented as a state of human experience that we have left but should seek once more to return. However, both speaking and listening involve active engagement and there are many barriers that can prevent this, and as a metaphor raises questions about the power imbalances of dominant and unheard voices. In this research, this has been considered in relation to the voice of the child and the many languages they speak through, and the messages these can offer adults if we are able to hear them. A holistic perspective offers a means by which to value these voices and through this highlight their relevance to adults, within the essentially compassionate framing of our state of living development. This focus has arisen through my biography and explored through a PhD that has offered an opportunity to listen to children's voices, to speak about them and perhaps an opportunity for them to be heard. This process has sought to make connections between my experiences in the world and abstract capacities and through this to integrate our languages and allow them to speak together.

10.7.4 Linear and Spherical Relations

An engagement with a spherical sense of relations (see section 3.7.3.3) with surroundings represents a profound shift I have experienced through the research process. This sense has been promoted through use of the theory of human consciousness as means to discern multi-dimensional experiential layers between individual and surroundings. Such a process has essentially lifted considerations off the page and into an all-enveloping whole, as an experience of relations not promoted by my wider cultural conditions. This process has enabled engagement with Froebel's concept of a 'spherical law' (see section 3.7.3.3) as an idea conveyed in a written form through which it is difficult to gain a full sense of

its meaning. However, it is this written form that has enabled this philosophy to be conserved for future engagement and to be met now with my own familiarity with a holistic perspective. Drawing upon Gebser's more recent holistic theory has enabled a synthesis of perspectives on human evolution in spiritual terms and the potential insight these might offer. This can be considered in terms of a distinctly human experience of holism and the implications from this within whole relations. Humanity can be creative and expressive of new ideas, and within this striving for the new there is scope for recognition of the need for reintegration. Such a process can be seen in a growing contemporary responsibility to incorporate culturally side-lined voices and perhaps scope within this to hear the relational languages through which these are expressed.

10.7.5 Self and Other

My insight into the potential for a PhD to be a deeply personal process of change was limited at the outset. This process has represented an integration of my own past influences with current capabilities and opportunities. My sense of self has sat at the centre of this transformation and formed the basis for a growth in confidence. This = growth is both in terms of a capacity to engage with ideas, to convey my own and to form connective relations. The experience has fuelled a deep inner conviction that this represents an impactful site of change and offers insight into the holistic suggestion that our most immediate experiences are foundational to broadest relations. Change pertains to questions about our most humane capacities, in being open to difference and finding the potential for connection across this. As individuals we operate within the domains of our own being, but growth always lies beyond this and in the act of discerning the potential for forming a wider connection. The drive to be led by children's voices has been a lifelong theme that continues to lead me on a good path, and my choices in relation to this have often been instinctive and based on a strong feeling, or passion. Such experience has convinced me that there is a wisdom deeper than the words currently dominant in shaping society and can be expressed both in the world and self and support a potential for our surrender to it.

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Appendices

Appendix 1: Sensory Elicitation Questions as Prompts for Reflection on Go-Pro[™] Footage with Parents.

- 1. Do the images say anything to you about your child's experience of being in that place?
- 2. What was YOUR experience of being in that place with them?
- 3. What were they paying attention to? What was of most interest to them? What sort of activity did they do most?
- 4. What were YOU paying attention to? What was of interest to you? What sort of activity were you most interested in?
- 5. What was it about that place that they liked/disliked? Did they act differently there than they might do in other places that you use in your day to day lives?
- 6. Does this affect your view of that place?
- 7. How do you think that they felt there?
- 8. How did YOU feel there?
- 9. How important were the other children and adults as part of that experience? For your child? And for YOU?
- 10. How does it compare to other places that you visit in this local area? Either indoors or outdoors?

Appendix 2: Sensory	Elicitation	Prompt	Questions	(Supporting	Connection	with	Wider
Life Context).							

1.	What do you consider to be a natural environment?
2.	How often do you visit a natural environment?
3.	Do you have any concerns about visiting natural spaces?
4.	Is there anything that makes trips to natural environments more attractive to you?
5.	Is there anything that makes trips to natural environments easier for you?
6.	Which of these places would you/your child most like to visit? (Pictures as prompts for discussion)















- 7. What do you think that your children get out of visits to natural environments?
- 8. What do you get from visits to natural environments?
- 9. What role do you think that schools or pre-schools can offer in relation to children's contact with nature?
- 10. Is there anything else that you would like to add?

Thank you so very much for your time, and for sharing your thoughts.

Appendix 3: Parent Recruitment Letter





Families and Nature Research Project

Tansy Watts, Canterbury Christchurch University & The Froebel Trust.

Are you interested in seeing the world from your child's point of view?

If so, would you like to get involved in some research? It would involve:

- 1. Borrowing a Go-Pro camera to use when you are out and about in your local area together...
- 2. Reviewing the footage with Tansy, and answering some questions about where you like to go, and what you like to do...
- 3. You will be able to keep a copy of the footage a lovely memento of your child's point of view on the world. Your contribution will help to build insight into how children and families get out and about in this changing local area, and what this contributes to children's lives, family lives and the future.
- 4. PLEASE SIGN UP TO THE LIST IF YOU WOULD LIKE TO HAVE A GO! Families have the right to withdraw their involvement at any time.

Data Protection

Any data captured by the Go-ProTM will be used purely for research purposes only, will be stored securely and seen only by the research team, in compliance with the Data Protection Act 2018. You will view all go-pro footage collected by your child and will have the opportunity to agree or refuse permission for its use. All writing about research will be anonymised in reports, so that participants and setting names will not be used, and you have the right to withdraw your involvement at any stage.

Any questions? Ask Tansy Watts (contact details supplied) Supervisor (contact details supplied).

Dear Parents,

Thank you for your time and involvement with this research. Here are just a few guidelines.

My research questions are:

How do children engage with their surroundings and with adults during visits to natural environments?

How do adults engage with their surroundings and with children during visits to natural environments?

Do young children influence the adults who accompany them in natural environments?

Your involvement:

Could you take a Go-ProTM along with you during any local outings that you take with your children? If your child is happy to wear it for a while – that's great. If not, it can be carried, or the adjustable stand can be wrapped around a handle of something that you are carrying.

What you consider to be a visit to a natural environment is totally up to you - and is obviously dependent on what is available to you, suits you and your family, and your choices or preferences in this.

Data analysis:

It would be beneficial if there was an opportunity to review the footage together afterwards and use this as a basis for discussion. I do understand that you may feel this is tricky to achieve due to time availability, however I am very flexible about where and when this could happen, and can make arrangements to suit you, if you are happy to participate.

I am exploring the questions above, and particularly interested in the ways in which young children might influence adults' perceptions, actions, interactions and experiences during trips, and how these might shape family choices.

Many Thanks.

Tansy Watts