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WALKING IN RHYTHM WITH DELEUZE AND A DOG INSIDE THE CLASSROOM: AN ETHNOGRAPHIC EMSEMBLE

DONNA CARLYLE

A thesis submitted in partial fulfilment of the requirements of the University of Northumbria at Newcastle for the degree of Doctor of Philosophy

Research undertaken in the Faculty of Health & Life Sciences

Walking in Rhythm with Deleuze and a Dog inside the classroom:

An Ethnographic Ensemble



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This thesis is submitted in partial fulfilment
of the requirements of Doctor of Philosophy, 2021
Northumbria University, UK
Donna Carlyle

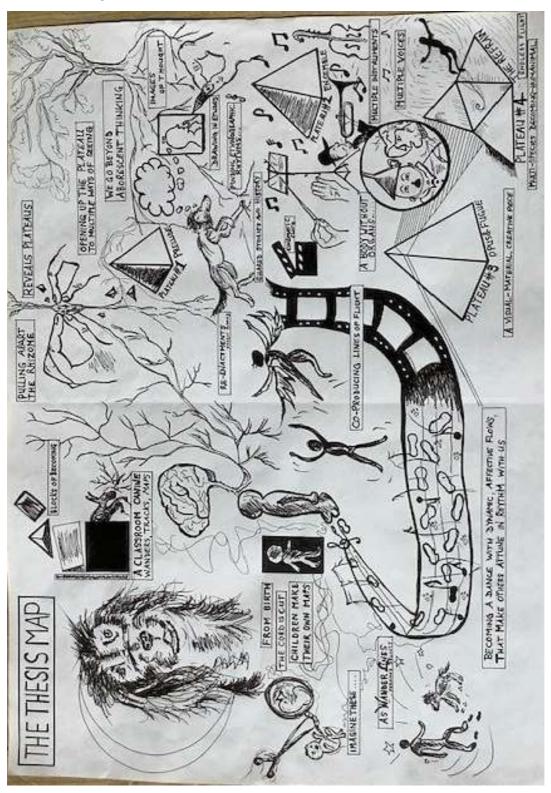
Abstract

This thesis-assemblage with plateau places and peaks describes children's interspecies relation with a classroom canine, a 3-year-old Springer Spaniel in a north of England primary school, (Year 6- 9-10-year olds and Year 4- 7-8-year olds, boys and girls; 60 children in total). The class teachers' experience of having a canine in class with them is also included. It utilises posthumanism, post-structuralism and new materialism perspectives as its research paradigm in synergy with a non-representational, visual-material methodology. Once feelings are cognitised or articulated, their true essence can be lost. Therefore, elucidating moment-to-moment child-dog interactions through the lens of affect theory attempts to materialise the invisible, embodied, 'unthought' and non-conscious experience. Through consideration of Deleuzian concepts such as the 'rhizome' and 'Body-Without-Organs' being enacted it illuminates new, 'situated knowledge'. This is explicated and revealed using visual methods with 'data' produced by both the children and their classroom dog. Photographs and video footage were taken from a GoPro micro camera mounted on the dog's harness and on the children's wrists, ('wrist-cam'). In addition, individual drawings, artefacts and paintings completed by the children are profound points in the research process, which are referred to as 'planomenons'. These then become emergent as a children's comic book where their relationship with 'Ted', their classroom dog, is materialised. Through their interspecies relationship both child and dog exercise agency, co- constitute and transform one another and occupy a space of shared relations and multiple subjectivities. The affectual capacities of both child and dog also co-create an affective atmosphere and emotional spaces. Through ethnographic,

participant observation and the 'researcher's body' as a tool, they visually create illustrations through the sketching of 'etudes' (drawing exercises) to draw forth this embodied experience to reveal multiple lines and entanglements, mapping a land-scape of interconnections and relations. This culminates in a sense of Ted as a 'petagogy' and 'pedadog', affording the children spaces and places for wellbeing, tactile sensibility, and learning.

Key Words: Rhizomatic Ethnography, Post-structuralism, Post-humanism, Visual methods, Child-Canine interactions, Rhythm analysis

Thesis Map(Visual Contents Page: Thesis Map Video Link https://youtu.be/fJp1vrKzG1Q)



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Including and intertwining:

- **Etudes** (Drawing Exercises)
- Pentimentos (Layers and marks left by an earlier drawing that show where changes are made) &
- Palimpsests (Multispectral imaging)

NOTE ON SUPPLEMENTARY & ACCOMPANYING MATERIAL

This thesis-assemblage was emergent and evolved in a naturally organic, true Deleuzian fashion. This means that it takes a rhizomatic path, each plateau containing a branching off or 'lines of flight' in response to the research process, aims and questions. Hence, it follows a non-traditional style of 'structure' and one in which the evolving process becomes a material one. It has no centre point, no hierarchy of order and is not rooted. It consists of connections, not copies, but each and every time a new map, a cartography, is propagated in many directions and dimensions. It's emergent process encompassed significant events which shaped and moulded the research as rhizome - through a series of affects and mutual becomings as I became-more-than-human, became-researcher.

The following are 'touchpoints', or 'nexus points' and as such, formed multiple plateaus along my journey and map in which events unfolded as continual becomings, always becoming something more...

ACCOMPANYING MATERIAL (Video links)

- A Thesis Map (Visual Contents Page) https://youtu.be/fJp1vrKzG1Q
- B Isle of Dogs Map (what a dog's body can do) https://youtu.be/50Upg-RuAyc
- C- A Canine in the Classroom https://youtu.be/lfOgSrzH1 o
- D- Amplifying the Children's & Ted's 'Voices' https://youtu.be/w-bcgiRbpps

E- International Society for Anthrozoology (ISAZ) 2021 Conference (online) Symposium: Animal Assisted Education video to accompany presentation

https://youtu.be/54M7PIVbboc

F- Link to Ethnographer Comic: https://youtu.be/3pbScduZ3hg

PUBLICATIONS

The research has been disseminated in the following conferences and publications:

Conferences:

- 2017 Poster presentation at Northumbria University PGR Conference, June 2017.
- 2018 Presentation to 27th International Conference for the International Society for Anthrozoology (ISAZ), University of Sydney, Australia "Animals in Our Lives" 2 – 5th July, 2018.
- 2018 Paper presentation to the Northern Network of Medical Humanities (NNME) at Manchester University Conference "Being Well Together" 19-21st September 2018.
- 2019 Workshop/Symposium presentation to Primary Education (Enhancement) Conference 16th May 2019, Northumbria University
- 2020 Seminar presentation to the Children's Research Group, Manchester Metropolitan University, 4th March 2020
- 2020 Symposium presentation to 29th International Society for Anthrozoology (ISAZ) online, "Animals in Education" 3-6th September 2020

Journals & book contribution:

Line of flight - towards a 'hands on' pedagogy

• contribution to book publication 'Tales of Adventure' (2021): Tails from the Classroom: Learning and Teaching Through Animal-assisted Interventions (Crown House Publishing, Wales) – Editors Helen Lewis & Russell Grigg

Lines of flight - deconstructing attachment theory

Carlyle, D., Robson, I., & Lhussier, M. (2020) Opening Up the Unfamiliar and Enabling New Pathways for Movement and Becoming: Through, In, and Beyond Attachment, *Journal of Childhood Studies*, 45(1), 1-18.
 https://journals.uvic.ca/index.php/jcs/article/view/19396

Lines of flight- immersion in the field

- Carlyle, D. and Watson, K. (2020) "Dog" is "God" Spelled Backward: "Poppy Jingles," the Staff Well-being Spaniel, Health & Social Care Chaplaincy Journal, 9(2), 1-10
 https://doi.org/10.1558/hscc.41120
- Carlyle, D. (2020) Multiple Me, the Unfolding Ethnographer: Multiple becomings and entanglements as a more-than-human ethnographer, *Entanglements*, 3(1), 31-42

https://entanglementsjournal.org/multiple-me-the-unfolding-ethnographer-multiple-becomings-and-entanglements-as-a-more-than-human-ethnographer/

Lines of flight - finding rhythms of relating

- Carlyle, D. & Graham, P. (2020) Bearing Witness to the Beauty of Enactive Kinesthetic Empathy across Species in Canine-Human and Equine-Human Interactions: Participant-Observation Ethnographies, People and Animals: The International Journal of Research and Practice, 3(1), Article 6, 1-14. https://docs.lib.purdue.edu/paij/
- Carlyle, D. & Graham, P. (2019) Bodies of Knowledge, Kinetic Melodies, Rhythms of Relating and Affect Attunement in Vital Spaces for Multi-Species Well-Being: Finding Common Ground in Intimate Human-Canine and Human-Equine Encounters, *Animals* 2019, *9*(11), 934, 1-16. https://www.mdpi.com/2076-2615/9/11/934

Line of fight – hounds of love

 Feature published in the *Times Education Supplement*, 8th March 2019- Research in action, "Why Schools Are Going To The Dogs". https://www.tes.com/magazine/england/2019-03-08-england

Lines of flights - animating a multi-species becoming

 Carlyle, D. (2019) Walking In Rhythm With Deleuze And a Dog Inside The Classroom: Being And Becoming Happy And Well Together. BMJ Medical humanities, 45(2), 199-210.

https://mh.bmj.com/content/medhum/45/2/199.full.pdf

Lines of flight - vitalism

• Carlyle, D. (2018) Re-energising The Role of Vitalism Theory in Child Development, Nature Orientation, and Research. *Contemporary Issues in Early Childhood*, 19(3), 246-255.

https://journals.sagepub.com/doi/pdf/10.1177/1463949117715942

Lines of flight - pluralism

Carlyle, D. (2017) Promoting Pluralism in Counselling: an Untapped Source of Relational Mapping as Therapeutic Process. *International Journal for the Advancement of Counselling*, 39, 311–321.

https://link.springer.com/article/10.1007/s10447-017-9298-7

Lines of flight - discourse and children's well being

 Carlyle, D. (2014) With a Little Help From FUN FRIENDS Young Children can Overcome Anxiety, Community Practitioner, 87(8), 26-29.
 https://researchportal.northumbria.ac.uk/files/25820327/p26 29 Professional Carlyle1.pdf

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This work started out as an academic piece of research with which to hopefully change and inform practice, but in the process of it, it became something other and much more. It emerged as a journey with many 'touch points' of interest and land marks (plateaus). As such there are many incredible people who have supported me and travelled with me along the way.

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I dedicate this thesis to two very special people in my life. The first is my dearly departed mother, no longer part of this world, a huge loss, tragically taken too soon from me. She has always remained a constant presence and force in my life. Her beautiful heart made me so proud to have had her as my mother and I can still hear her say "just do your best Don, Don, it's more than enough". Our love of dogs, horses and hamsters is something I look back on and cherish. She indulged my love of animals, gifting me my first dog, Shandy, the first of many that became part of our family life. That my thesis includes dogs and children is quite surreal. I imagine her saying, "oh, how very lovely". My love and admiration for her is constant.

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Author's Declaration

I declare that the work contained in this thesis has not been submitted for any other award and that it is all my own work. I also confirm that this work fully acknowledges opinions, ideas and contributions from the work of others.

Any ethical clearance for the research presented in this thesis has been approved. Approval has been sought and granted by the Faculty Ethics Committee at Northumbria University on 20.3.2017

I declare that the Word Count of this Thesis is 82, 340 words

Name: Donna Carlyle		
Signature:		
Date:		

Glossary of terms

Affect	A feeling, sensation, or image freed from organizing subjects. It is not objectifiable and quantifiable.
Assemblage	A body that connects with another body forming emergent entities that create connections, with an emphasis on fluidity and multiple functions.
Becoming	A condition of ever-renewing difference and change.
Body-without-Organs	A philosophical surface. A process of de-territorializations, lines of flight and freedom without organization and stratification.
Diffraction	A mapping of inference to illuminate insights through one another while paying attention to patterns of difference (diffractive reading)
Duration	Our relation to time, ethically and politically.
Etudes	to study, consider, observe, practice. A drawing exercise or piece of music, a project, research.
Events	these are moments which not only happen in real time (actual) but are also moments that can contain virtual (that yet to come) moments of creativity (images of thought) as Deleuze consider that very act of thinking and movement to be creative forces and therefore 'events' in themselves
Fold	The folding inside of what Deleuze calls the 'forces of the outside'- a folding or 'doubling'. One's relation to oneself.
Intra-action	Barad's term which understands agency as not an inherent property of an individual buts as a dynamism of forces.
Lines of flight	A concept developed by Deleuze and Guattari to depict the possibility of escape, branching off and the moment in which there is an expansion and new creation.
Milieu	Environment, territory, time and space (movement), no boundary or distinctions.

Multiplicity	A complex structure, an entity that origin
Widitiplicity	A complex structure, an entity that origi-
	nates from a folding of simple elements.
Distance	Porous, without boundaries.
Plateau	A place reached when circumstances
	combine to bring an activity of intensity
	and heightened energies to a state of
	progress. A high plain.
Planomenon	Where the assemblage fits together
	(aligns with) the variables of the stratum
	(group in society) and functions in unity.
	It rotates in all directions, an abstract
	machine outside the stratum. A sub cul-
	ture. Similar to a rhizosphere. Flows of
	de-territoralisation.
Plane (of immanence, consistency)	Absolute de-territoralisation. That yet to
	come. A pure plain of smooth space (a
	space without structure and regulation).
Rhizome	off shoots and knots of roots, connect-
	ing any point to any other point, operat-
	ing by variation, expansion, no begin-
	ning or end.
Rhizopoesis	Author's own neologism. Related to the
	rhizome- to bring into being, making,
	producing playful conditions (spaces)
	for expression through affective meth-
	ods and activities (such as pendulum
	painting, artwork, photography).
Simulacaria	as back projection in cinema. A pro-
	cess of relating each concept to the var-
	iables that explain its mutations. Images
	of simulation but without similarity. From
	1993 Deleuze preferred the term 'as-
	semblage' to mean the same thing. This
	was due to the idea that things do not
	just 'simulate' but 'actualize' from the
	virtual.
Situated knowledge	A term used by Haraway to mean
	knowledge (vision) that reflects the par-
	ticular embodied experiences of the
	knower.
Territorialisation (re- and de-)	Territoralisation is organization (as in
	bodies in a classroom). De-territoralisa-
	tion is being freed from and escaping
	ones original territory. We oscillate con-
	tinually between de-territorialisation
	and re-territorialisation.

Thosis-assamblaga	this term means that the thesis is a se-
Thesis- assemblage Wayfaring	ries of events and is a process-orientated research journey. It is an amalgamation and an 'assemblage' of multiple parts. It contains a collection of social formations, viewing them as continually evolving between human and nonhuman elements. the embodied experience of movement as in the process of walking and wandering and gaining knowledge in the
	world through a whole-body. An old
MUNICAL TERMO (as 14s leader	sea-faring term meaning 'navigating'.
MUSICAL TERMS (used to depict rhythms of relationships and rhyth-	
mic writing process)	
Prelude	Introductory piece of music
Concerto	A musical composition
Ensemble	Group of musicians performing together
Opus	A set of compositions
Fugue	A short melody of phase
Refrain	Lines repeated in music or poetry
Rhapsody	Spontaneous, free-flowing yet integrated in one movement. A range of moods, colours and tonality.
Staccato	A crescendo (increasing in loudness)— separation, a de-territoralisation
Non lagato	De-crescendo (gradual decrease in sound) – a re-territoralisation. An in-between phase from being free-flowing to structured and ordered.
Virtuoso	Performance
Harmony	Individual musical voices that group together to form a coherent whole
Polyphony	A combination of many sounds
Arrythmia	Breaks in synchrony
Polyrhythmia	Collections of rhythms in synchrony
Eurhythmia	Harmony
Intermezzo	Connecting pieces
Coda	In musical composition, a concluding section (usually at the end of a sonata movement) based on extensions or re- elaborations of material previously heard

The plateaus are emergent and a brief summary of each is as follows:-

Plateau #1 PART A INTERMEZZO: Background and context of the study. Justification for the research. Writing in plateaus and epistemological positioning. Research questions. Defining key terms related to Deleuze-guattarian philosophy. Utilising 'etudes' (drawing exercises) as an observational 'tool' and for fieldnotes.

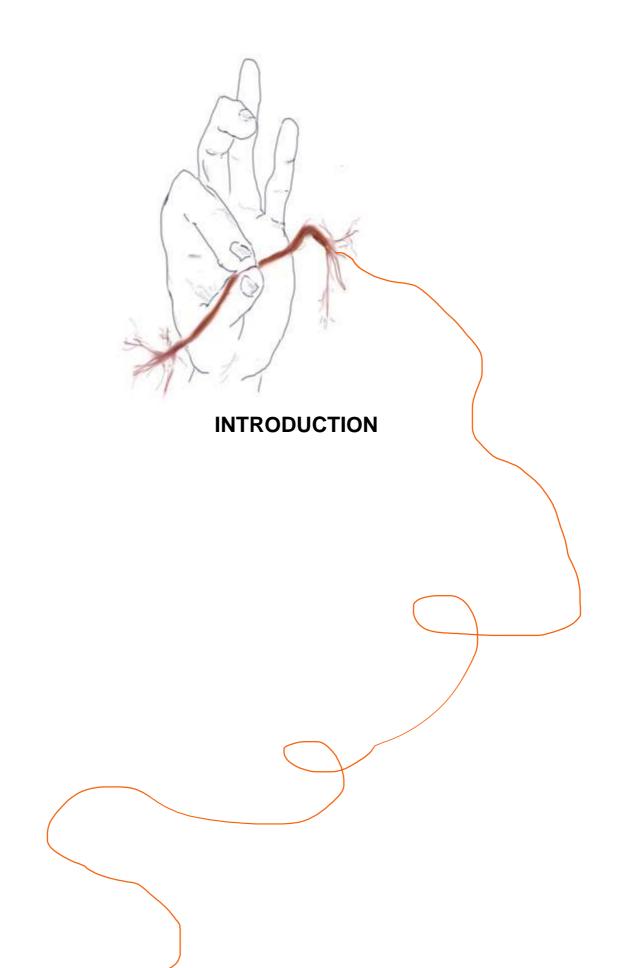
Plateau #1 PART B CONCERTO: Wayfaring (navigating) through the academic literature. Emergent conceptual-theoretical framework 'affect'. Our co-existence with canines and becoming-withness. The importance of the 'umwelt'. The relevance of an onto-epitsemology and agential realism to the study. Exploring sensory pedagogies.

Plateau #2 ENSEMBLE: Affective methods, approaches and instruments used to generate the 'data'. Research protocol and participant tasks. Ethical framework and protocols as reflexive process. Exploring post-humanism. Shifting perspective to the possibility of relationships as vertical and lateral through temporal time-slicing and sensory appreciation. Developing a model of the child as a 'vector of entanglements'.

Plateau #3 OPUS & FUGUE: Sense-data generation and rhthym-analysis. Emergence of six planomenons from artwork workshops (pendulum painting, craftwork, phtography, mini zines). Children's storying and narrative through the production of a comic. Mapping the affordances of a dogs body in the classroom – The Isle of Dogs. Emergent ethnographer transformation (multiplicity) and 'deep hanging out' in the field, becoming part of the children's peer culture. The classroom emergent as a 'music machine' and notation created to amplify the 'soundscape' of the class and amplify the voices of Dave-Ted-Tails and the children

Plateau #4 RHAPSODY-REFRAIN & CODA: Research findings and discussion. Illuminating the key findings of a 'petagogy' and Dave-Tails-Ted as a 'pedadog' and his connection to a sensory pedagogy. The significance of sophisticated touch and tactile intimacy in middle childhood for wellbeing. Teacher and ethnographer as an embodiment and extension of Dave-Tails-Ted in the classroom. Children and Dave-

Tails-Ted- 'becoming-available' to one another. Productions of space(s) for becoming. Visual narration as method through biographical 'sketches' (comics). Exploring childhood 'soundscapes'. Revisiting the research questions and illuminating contemporary animism, asemic marking and zoontologies for further consideration.



INTRODUCTION and OPENING PLATEAU (1): PRELUDE

Part One, Intermezzo

From infancy we concentrate happily on ourselves and other organisms. We learn to distinguish life from the inanimate and move toward it like moths to a porch light....To explore and affiliate with life is a deep and complicated process in mental development. To an extent still undervalued in philosophy and religion, our existence depends on this propensity, our spirit is woven from it, hope rises on its currents.

- E.O. Wilson, 1984 "Biophilia".

Echoes from the (Deleuzian) plan(e) of consistency

In this introduction and 'prelude', I set out the background to this study, setting the scene, both in terms of my own position within it as an embodied and rhizomatic experience, becoming-researcher, becoming-child, becoming-animal, and the context of the moment to moment encounters and events of the spatio-temporal practices of the participants. I then outline in prelude rendition part two how the study of affectual encounters and how their affordances connect with the idea of 'somatic intelligence' (Lorimer, 2006: 98: In Lee et al, 2014) and the 'agentic child' (Prout, 2005), whilst acknowledging this is a culturally bound Endeavor (Lee, 2001). I follow this with details about the structure of the thesis, my research aims, questions and terminology. My use of the term 'echoes from the plane of consistency' is a reference to the multitude of resources and literature which have stimulated and engaged me in new and exciting ways of how we acquire knowledge from the world. This plan(e) of consistency is rather like my point of initial reference on a map, and the 'echoes' relate to the many recurring and resonant themes that have surfaced as I travelled along this plan(e) through this rhizomatic process (please see thesis map).

In this thesis, I discuss how childhood experiences of interactions with dogs (canis lupus familiaris) constructs a significant relationship, distinctive from many other human-animal entanglements, which potentially reveal their importance to human development as articulated by Haraway, (2008:7) in her explication of 'companion species'. It aligns with and attempts to be at the cutting-edge of current discontents with mere human-centric understandings of the world, embracing a post-human, post-structuralist methodology to challenge and question the Anthropocene, and 'man' as the centre of all things, (Braidotti, 2013; Haraway, 2008). I concur with a Baradian notion of 'onto-epistemology' in that I do not consider what the world is, and how we come to know it, as discrete separate entities, (Barad, 2007). Such a stance also adheres to an ethical model of posthumanism, meaning that non-human entities are bound up in ideas of entanglement and relational phenomenon, (Barad, 2007).

The child-dog interaction and consequent affects and affordances from this interaction, form my 'unit of analyses', (Gibson, 1979). Viewing the child-dog relationship in this way is important as it means that they are not considered as single entities, in accordance with Deleuzian philosophy they are a *relationship*, a symbiotic unit as it were, with each one affecting and being affected by the other. Thus, the child-dog assemblage is seen beyond a reductive, fixed relationship to one in which my lens is sensitized to the affects, intensities and sensory elements of experience; as 'vectors of entanglement', and moving, always-becoming bodies, (Carlyle, 2018: 3). I will explore in essence how the child-dog relationship has potentially transformative affects during these social interactions on children's sense of 'self', agency, and wellbeing. After which, through post-structuralism, post-humanism, and new materialism (Braidotti, 2013; Barad, 2009) I explore the sensorial and embodied mechanisms of these encounters and interactions through the perspectives and voices of children and how this transpires in their everyday practices within a classroom and school setting within the Northern region of England.

Within this thesis, I playfully engage with the notion of the child as a 'vector of entanglements', in conversation with the work of Gilles Deleuze, (Deleuze, 1994). I initially

coined this term whilst exploring my interest in children's sensory worlds with my Principal PhD Supervisor, having been encouraged to think in new and refreshing ways as I reflected on my clinical work. I had realised that critical theory (post-structuralism) supported this reflection on the multifaceted nature of human development, opening up how is can be understood in alternative ways; that it can be fluid and intertwined with both a human and non-human association and envelopment. Consequently, the term 'vector of entanglements' in this thesis refers to dynamic aspects of interactions children encounter through their relations, affects, movements and individuated assemblages with others, though notably with dogs, which are intimately connected to lived experiences, (Carlyle, 2018). This moves us away from the problem of positivist and reductionist methods that do not give significant credence to our deep entanglements with non-human entities and one another in the world; that which entails affect phenomenon, which is elusive in quantifying through scientific measure, (Ingold, 2021). It sensitizes us to the corporeal, embodied and sensory elements of relationships. The thesis-assemblage, in combining these elements is, therefore, both a practical and philosophical exploration.

In problematising the current ontological and epistemological understanding of child-dog interactions, I argue how they restrict, and indeed 'flatten' our insights into the

complex mechanisms at play when children and dogs come together, (Sousanis, 2015). Beyond the current positivist paradigm, I offer a visual-material ontology which encompasses the fundamental elements of affect, embodiment and attunment, that are somewhat overlooked and unexplored in any sufficient depth within child-dog encounters, (Gee, Griffin, and McCardle, 2017). I will go on to set out ways in which they are neglected in childhood studies of wellbeing

PAT dog Humphrey at Northumbria University's wellbeing event. Author's photograph. Reproduced by kind permission of students.



and pedagogues of education. More so, children's voices are remarkably absent

from current discourse. Close observation of such multi-species¹ encounters conducted over long periods of time, with robust methodologies has been called for (Gee, 2018). In returning to Haraway's central question, "whom and what do we touch when we touch this dog" (Haraway 2008:5). I enable a position of curiosity

that engages and attunes

my ethnographic lens to one of sensory, tactile, and embodied ways of knowing and knowledge production. Thus, the mechanisms and processes involved in human-animal relations and interactions can further add to this somewhat neglected

aspect of current discourse and evidence-base.

My thesis details primary research undertaken within a Primary School setting and classroom in the Northern region of England. In keeping within a Deleuzian conceptualisation throughout, it is a boundless adventure in which rhizome and research co-mingle, working together. Consistent with an

ethnographic approach to well-being and social research, the children were active participants within the data collection phases of the research project which lasted over a full academic year, which included a 3 month pilot phase. In that

context, I supported them to discuss and reflect upon their relationship with 'Dave' their classroom dog. In keeping with the idea of children being active participants, (Mason and Danby, 2011, Clarke and Moss, 2011, James, 2016) I have incorporated activities and visual methods, as well as my own researcher body as a 'tool', in what





¹ the term multi-species is preferred throughout this thesis-assemblage, whilst acknowledging that Ingold proposes an 'anthropology beyond humanity' in conjunction with the Aristotelian order of difference implied by the taxonomy of species.

broadly constitutes the flexible approach of ethnography. It is sensory and co-constructive. These processes quickly emerged in the materialisation of my reflections as plateaus and imaginaries, 'images of thought' (Deleuze and Guattari, 1987/2013) to support the thinking and mapping of milieu's (see p.25 map). My research protocol encapsulates Deleuzian-Guattarian activities which connect with key concepts around the relational elements of human-animal interactions, such as their inimitable lexicon of the rhizome, a Body without Organ's (BwO's), wander lines, and cinematic folds and cuts. The BwO's is further emergent and discussed in detail in Plateau 3 'Opus and Fugue'.

Orientating the thesis format – writing in plateau's:

Lived experience as onto-epistemology

As my own researcher process unfolded alongside that of the participants lived experience, in a shared endeavor, it can be viewed as an interplay between the virtualactual texts and images which transpire. This entails the notion of how Deleuzian philosophy gives significance to emergence and how the 'virtual' event is like simulacaria (time-lapses-frames) and thus viewed as 'that yet to be' (Deleuze and Guattari, 1987/2013). One can envision the cinema reel as it projects a story and an unfolding of 'lived experiences'. Notably, Deleuze recognizes that science, philosophy and art are interlinked disciplines. In applying operations of research and rhizome, this thesis-assemblage (assemblage meaning a collection of things, an arrangement which is socially fluid in multiple form of expression) is about connections and entanglements between human and non-human (living) things- in this instance a dog and children, which create affect beyond rational thinking, thereby constructing other ways of being and becoming. In doing so, the philosophy of Gilles Deleuze and Felix Guattari concern with the affectivity and contested and absent 'bodies' of childhood (Horschelmann and Colls, 2010) in contrast to developmental trajectories, and 'milestones' is considered as events and happenings (relational productions) which are folded into plateaus on a number of occasions.

According to Burman, (2008) and Bloch (1992), 'blocks' of childhood become vehicles for 'becoming', along a line of deterritorialization, dislocating it from conceptual

models of psychology and linearity. I acknowledge ways of becoming through ways of moving, in essence 'wayfaring', (Ingold, 2011). This way of viewing children enables an attuned ethnographer to be sensitized to the affective intensities and forces, as well as the temporality of relations as described by Bergson, a key influence on Deleuze's thinking, in his concept of 'duration' (the nature of time, continuity of movement), (Bergson, 1950). I make these connections in the context of my study that is post-structuralist, rhizomatic, and methodologically naturalistic (observation) and materialistic. In doing so, I adapt, develop, extend and arguably re-purpose some of Deleuze's ideas about the affectivity of childhood as one which is not set or fixed but fluid though interactions and webs of relationality². In doing so, I offer a note on the use of language. Many Deleuzian concepts and ideas use neologisms and language which may have multiple meanings and sound rather esoteric. This in itself is in keeping with the whole idea of post-structuralism and how Deleuze wished to write and think dynamically, adopting vocabulary which describes the flow of life and how writing should not be representation but invention, (Colebrook, 2002). Inevitably, or rather curiously, I also engaged with neologisms in understanding concepts in multiple ways, which I refer to during this thesis-assemblage, and as such I have included a 'glossary of terms' as a useful tool to aid reading and exploration of this thesisassemblage.

However, I also offer this not in a way to concretise meaning, but for you as the reader, to be imaginative and approach the research and data beyond the confines of image and text, and the confines of interpretation to object or subject. Inquiry should therefore be viewed as an interrogation, not a representation. In arguing for the image of the subject, we can see the world as products of the imagination, therefore Deleuze offers a philosophy which is creative, embracing a creative tendency for life to form images of itself. In keeping with this stance, it is also notable that my own identity remained fluid as I shifted from author to ethnographer, to researcher to teacher, to child to Dave-Tails-Ted.

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² Deleuze's ideas on the 'becoming-child' and the kinaesthetic, visceral logics of the body as vectors of positive affect I re-purpose as my own theoretical and methodological ideas of the 'child as a vector of entanglements' in everyday encounters to understand affective forces (Carlyle, 2018).

Deleuze's ideas about children was attractive to me because it was multi-faceted and provided a general model that connected lived experience which synthesised the actual and virtual processes of 'becoming', seeing the child as a vector of affect and an activator of change. I then selected and adapted Deleuze's concepts to help me operationalise some of the ideas I had selected from his work. Three of these foundational ideas became *touchpoints* in the research process and are 1) rhizome, 2) becoming-with, and 3) a body-without-organs. These essentia ments are woven throughout this thesis-assemblage as I synthesise their relevance to my epistemological positioning. My understanding of the relevance of Delevance and the ways in which I would adapt it, inspired by these other sources, work emerged over time – and in time informed, and was informed by, the empirical data I This took an essentially rhizomatic form, thus stacking the structure of my thesis had non-conventional format from the outset. I discuss this in this opening 'plateau', preferring not to refer to them as 'chapters' but 'plateaus' which emerge and envelop process throughout this boundless philosophical adventure. Although I have provided a linear (numbering) of my sub sections this was somewhat in conflict with my ideas of rhizo-mappings, as essentially, I adhere to a post-structuralist paradigm; undertaking a rhizomatic flow of text, materialising as lines, images and drawings – in similarity with an ethno-mimesis, and 'walking ethnography' as depicted by O'Neill, (2008) and Ingold and Lee Vergunst, (2008). However, for the purposes of meeting set criteria the commat is set out accordingly with the proviso that the reader can still choose to ead any elements of this thesis-assemblage in relation to their own connections and marerial their own connections and marerial pects re-enacted. My etudes and images are not numbered in order to attempt to create a synergy between text and image.

A further emergent tool utilised within this thesis-assemblage, during my fieldwork and subsequent reflections, became that of recording events as 'etudes' (drawings and sketches) and also writing in comic panels to produce my researcher narrative. As such this embraced both image and text, exploring the synergy between them, enabling both a diffractive (broken through panel's or cinematic cuts) and rhizomatic

ethnography, as depicted by Scott McCloud's, (1993) 'Invisible Art'. Although sequential images have been critically appraised by Cohn, (2013) as he argues they require requisite 'fluency' in linguistic terms, they are nonetheless a useful and illuminating mechanism with which to explore a process ontology in a creative way. As a very visual learner (Mayer and Massa, 2003) images and 'etudes' developed alongside my own process of 'becoming-researcher' and enabled a dialogue with my own 'internal supervisor' and that of the reader, (Casement, 1985/1990). They provided an ideal tool with which I could demonstrate and bear witness to affect, showing how my 'etudes' became an embodiment of this process ontology. This re-enacting of 'scenes' and 'events' is also fundamental to explicating a non-representational positioning. In addition, they also allow for an elicitation of Deleuze's (1994) often complex and challenging idea of 'folds' as aspects of the sequential image enables a temporal 'here and now' fluency and quality. One event 'folds' into another (in a similar manner to a cinematic reel) and in doing so we fracture time and movement so that we can see long enough to portray an aspect of affect. This is one of Deleuze's key concepts in the sense of his vitalistic panacea for living and always 'becoming' in the world. Images, sequential and otherwise can 'freeze frame' events, in a cinematic style so that we notice the finer nuances of social and more-than-human phenomenon. Unlike the transcribing of data, these are produced in 'real time' and thus retain an element of 'situated knowledge' (Haraway, 1988: 8) which is instant and affective (Causey, 2017). As Strom and Martin, (2017) assert the 'assemblage' (thesis-assemblage) can be seen as always producing something. It is a creative and collective journey as I navigate between reading, sketching and writing. As Barad (2007) asserts I hope to introduce the reader to this performative element of my research process, putting 'out there' images of multiple and rhizomatic experiences being enacted. I delight in the reader seeing what I see, as this in itself is a shared endeavour with multiple meanings.

Using 'etudes', 'pentimentos' and 'palimpsests' to animate experience

Throughout this thesis-assemblage the use of 'etudes' and 'pentimento's' are intertwined. These are my drawing exercises (etudes), sometimes multiple, layered embodied experiences (pentimento's) and multispectral imaging (palimpsest) throughout my field work and writing journey. They form 'an image of thought' as it were, akin to the non-representational ideas which are both Deleuzian and post-structural. The inclusion of such is integral to my researcher epistemological-ontological positioning- in that it animates and reveals the kinaesthetic, inter-corporeal (embodied) nature of affect. In accordance with an affective stance I have not numbered my etudes as I wish the reader to have a sense of the flow and flux which are pivotal to the process of using a visual-material methodology. This is a fundamental element of this research process, as the mere 'capture' of affect renders it 'lifeless' as affects are a constant state of flow and force which evade capture. In using etudes and pentimentos I endeavour to re-enact 'cuts' as happenings and events which are illuminated affectively. In my previous section 'orientating the reader' you will have considered how the relevance of these become ever more apparent in offering an alternative thesis structure to that of a traditional one. It invites a reading that is non-linear and sequential. You can begin in the middle or at the end, as I concur with Deleuze and Guattari's (1987/2013) notion of dis-order and support a rhythmic flow, indeed rhizomatic flow in the reader. I encourage you to go back and forth, shoot off at any point in accordance with you own train of thought and 'lines of flight'.

Background to the study: a research-dialogue assemblage

(a) researcher's own history (b) the concepts and (c) the research site

I begin with some personal and professional history, as this study was developed initially in response to my experience. My experience working with children and families over 25 years within the NHS had led me to re-conceive the complexity of children's relations with others, essentially viewed through what could be considered the one-dimensional approach and application of 'attachment theory' (Bowlby, 1988/1992) as dominant discourse (Duschinsky, Greco and Solomon, 2015b). I would also consider that in a study with naturalistic foundations I am concerned with describing a

setting, a context, a culture and individual actor's movements, intentions and agency. It is in this context that I locate myself within the thesis, declining the non-natural perspective of an objective researcher. In doing so, I enabled consideration of my research activity within a 'naturalistic' setting to be argued from a quantum mechanics sense, thus allowing me to consider not just the systematic or objective observational approach, but how awareness changes the nature of reality at fundamental levels.

My career pathway perhaps, unlike other careers which start with professional qualifications and go on a clear journey of progression within those defined careers, is ironically somewhat rhizomatic, reflecting an employment history which is exemplified initially with discovery, opportunity, diversity and exploration. My professional endeavours began with influential personal experiences. My family life was one of caring and compassion, creativity: art and poetry as well as a life enriched by several family dogs. My first pet dog was called 'Shandy' - a miniature poodle given to my Mum by an elderly gentleman who was a patient in the hospital ward she worked on. As 'Shandy' could no longer be looked after due to the elderly patient having to go into residential care, she came to share our family home. This white fluffy, singing/howling and clapping poodle had a huge effect on my childhood. She was a constant companion, sharing my triumphs and tribulations, providing us all as a family with moments of comfort and frivolity. Following Shandy's death, I became equally attached to my Old English Sheepdog, Sheena, bought for me for my eleventh birthday. She played a key role in my melees into adolescence. She was my 'sounding board' and my transitional object/lively teddy bear. In addition, art, and poetry as a means of expression was very important to me during my childhood years and into my adolescence and adulthood. My aspirations to attend Art College, was unexpectedly altered after a family tragedy and my step-father's brain injury following a tragic accident. Whilst then working as a paste-up artist in my uncles advertising agency and graphic design studio, my inclination towards caring for others returned and increased, ultimately leading me on a very different path into nursing and later public health practice, following in my mother's footsteps. The tragic and sudden death of my dear mother further enhanced this. During my mid-twenties and early thirties, I

acquired a strong interest in child development and health inequalities. My role as a Health Visitor and subsequently Health Visitor for children with additional and complex needs further espoused this.

Following on from this, my role as a Sure Start Health Co-Ordinator, was something of a surprise awakening in terms of the tensions which can exist between health, education and social care, bringing together a wide range of collective but competing formal structures and processes. I co-ordinated projects, provided consultation and supervision to frontline practitioners, managed meetings, and entered further and higher education for personal and professional development. Several innovative projects were explored with the team, one being the setting up of a counselling service for children, initially those children who had been bereaved. I began to see beyond defining health and well-being with a move towards therapeutic paradigms of practice, focusing on the working values of sensory processing and integration, embodied emotion, agency and autonomy, emplacement, individual growth and actualisation. This connects to my ideas around 'multiple' perspectives and ways of viewing children in line with a post-structuralist and materialistic frame. The 'multiplicity' of becoming-child seemed lost in practice and Deleuze afforded me a way to re-configure these important aspects of child development and experience.

My work continued with children and with my new-found therapeutic skills I took a leap of faith into a culture very different to that which I had known, a hospital-based child and adolescent mental health service. I took up the post as a Tier 3 Child and Adolescent Mental Health Service (CAMHS) Therapist with curiosity and enthusiasm, to further understand and explore child development in all its complexities. This provoked many questions for me related to personhood, identity and the classification of ways of being in the world. Such classifications, categorisations, fixed identities and labels did not sit easily with me, although I appreciated the need to know and understand complex patterns of relations not only from that afforded by attachment theory and developmental psychology but also through the alternative lens of non-representational and rhizo-images as purported by Sellers and Gough (2010:2) and 'writing as a form of thinking rather than a form of representation'.

Through my appraisal of vitalism theory, I became affirmed that this was indeed a worthwhile exposition (Carlyle, 2018) as vitalism threads through the entire rhizomatic journey on which I embarked. As such this thesis-assemblage has always been one which aligns with post-structuralism and hence emerged as a rhizomatic structure, in contrast to the conventional academic style. In addition, it has become an ethnographic portraiture, as I envision the essence of being in the world, and the vitality of personhood, animality and becoming.

During my clinical career I welcomed an opportunity to join an Early Years Mental Health Service as a 'specialist' (Early Years

Mental Health Specialist) within a Sure Start Children's Centre in Sunderland, returning to my familiar public health roots and early intervention. Although within a Tier 1 specialist service there remained tensions for me within a structure which also labelled and categorised childhood, seeking to understand once more children's



complex and 'challenging' behaviours across agencies. I resisted for several years being professionally categorised into one particular modality such a 'systemic', 'cognitive-behavioural', 'person-centred'; instead preferring an integrative, eclectic or pluralistic approach to my practice. However, my appreciation of naturalistic observation led me to pursue infant observation from a psychoanalytical and psychodynamic perspective. This helped reconcile my practice with my initial psychodynamic foundations and enriched my work within a relational context. At the time I did not consider how unique and different my approach to be, it was only through further conversations and networking which highlighted my liminal position, as a 'pluralist', and this in turn led me to another search for an appropriate way of viewing the child. This new way of viewing the child allowed me to remain open to all of the vicissitudes of childhood through the use of a sensory processing and a sensory integration model. Dunn's sensory processing model helped shape and rejuvenate my practice to embrace a more pluralistic, naturalistic approach, (Dunn, 2005, cited by

Sameroff et al 2005). This approach provided a framing of my understanding of children's behaviours, creating a more *optimistic* vision of possibilities rather than a fear of negative outcomes, thus allowing the facilitation of more positive interactions between children and carers. It also gave credence to the environment and its affective potency. The appreciation of sensory elements within child development has been a long-standing area of great curiosity for me. I consider that we embody more than the traditional five senses (vision, hearing, touch, smell and taste), and that our sensory systems are becoming an important part of ontological understandings in qualitative research of the relational and interactional processes of bodies in both human and non-human development. I discuss this further in Plateau #2, 'Ensemble'.

As a clinician I also developed a strong interest around the use of 'Pets as Therapy'.

When completing my Psychoanalytical Observational studies, I engaged more with the complex and extensive works of Freud, discovering his curiously uncanny like for Chow Chows from biographers. His own dog and Chow Chow, 'Jofi' was apparently often in his sessions with his patients and he reportedly would sometimes adjust the session according to Jofi's responses! For example, if Jofi left the room or laid down to sleep, Freud would take this as a cue to either end the session or change technique. Following Jofi's passing, he acquired Lun.



Freud and Lun, Vienna 1937.

Source: https://willmydoghateme

A colleague I worked alongside in Community CAMHS, who embraced a unitary therapeutic approach as a Cognitive-Behavioural Therapist, one day asked me what I thought about the use of dogs to help children overcome their dog-phobia in terms of the 'systematic de-sensitisation' technique she used.

This resulted in my own use of my 'companion species' and dog 'Teddy', introducing him to a therapeutic session in a safe and carefully orchestrated way. I remember seeing the initial apprehension on the little girl's face, clearly afraid, and how she showed this through tension in her body as she retreated into her Dad's protective

embrace. Teddy, being Teddy, he lifted himself up on his back legs and proceeded to show-off his 'bolo dance' (a dance strongly associated

with the Bolognese breed of dogs) clapping both his front paws together. With a collective 'aww' and watching her fear melt away to a beaming smile, I realised that there was something quite aesthetic, sensory and embodied at play. The animating of Teddy, his **head** *tilt*, and cuddly' charisma seemed to convey 'I'm here, I'm listening', as shown.



I further explore the relevance of this in Plateau

#2 'Ensemble' as I expand on the notion of the aesthetics and affects of cuteness, (Dale, et al, 2017), connecting with my long-standing appreciation of sensory experiences as significant in child/human development. My transition to working in higher education was an opportune, almost natural progression. I had been collaborating with an academic from a university in the north east of England, jointly delivering a parenting programme within a community setting. This working alliance served as the catalyst for me to explore and consolidate several enjoyable years of both academic study and professional practice. When I was appointed to an academic post, I embraced ways of thinking that could develop my ideas and enable further, deeper and new understanding. I entered a new professional culture and returned to questions of the vicissitudes of childhood and how children experience the world and others in terms of their development and 'becoming'. I discovered that academic life allowed me to express myself personally, and to support my thinking professionally in other new and exciting ways. I was able to re-visit questions around sensory dispositions and affect, emphasised by the need to identify and articulate my areas of interest and knowledge to the academic community. In this context, I was pleased to have the opportunity to engage in doctoral study, and in developing my ideas for this. I reflected on both personal and professional changes I had experienced over the years, and how there were both regularities and changes in how I practiced and talked about my experiences over that length of time. This academic platform offered me the opportunity to become-researcher, become-change-agent and in doing

so illuminate the embodied, agentic and spatial lives of children which were under theorised, (Hackett, Proctor and Seymour, 2015, Moss and Petrie, 2002).

Taking dogs and Socks, more seriously

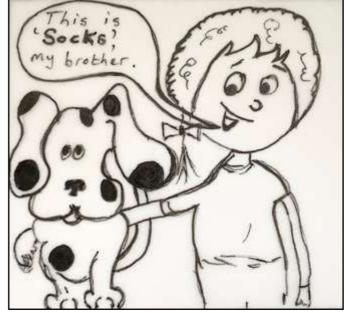
From the beginning, my ideas for this study therefore involved professional change. Within this theme I began to connect ideas that were important to me to do with the purpose of work with others and the practical pursuit of affecting change. My professional life had been mostly centered on children's relational contexts and their capacities to grow and achieve a sense of well-being. I was convinced that whatever specific questions were to be addressed within my doctoral study, they should address the development of practice and the development of new ways of considering children and other significant relationships they encounter in the world, beyond the parent-child dyad. One further clinical example in practice stands out.





This related to a home visit to a little girl referred to our EYMH service for anxiety

and behavioural difficulties. I recall quite vividly how she referred to her family pet dog 'Socks' as her 'brother'. This was not the first occasion I had heard children refer to the close relationships they had formed with their 'companion species' as similar to having a sibling.



It resonated with my own close relationship with our family dogs during my own childhood.





A long-standing interest in PAT Dogs (Pets as Therapy) was affirmed by further pro-

fessional and personal experiences, as I have already mentioned with the use of my own dog, 'Teddy', as a therapeutic 'tool' within CAMHS and also as a visitor to a colleagues nursing home. Seeing the elderly residents faces light up as my furry companion entered the dayroom, and children respond to his presence in the therapy room, convinced me that something uniquely beneficial was taking place. It seemed to be that dogs can be 'a provocation to curiosity' and therefore open up spaces for thinking and reflecting through their calming and grounding demeanor, (Haraway 2008: 8). Thinking of dogs within settings I also became enthused by Northumbria University's use of PAT Dogs during student well-being events and made connections with the Student Union Co-Ordinator. This further enhanced my interest as I witnessed directly the kinetic energies and vitalistic forces at play within student-dog interactions as shown: spaces for being-well-together.

This evoked in me a desire to understand the multiplicity of children's relationships and what animals, dogs in particular, constitute and afford children in terms of their

overall well-being and development. It called in to question a new way of working and conceiving children, not just through unitary models and approaches but through integrated and pluralistic paradigms of practice. Expanding my thinking of pluralism in practice 'mapping and diagramming' new conceptual milieu's (see link to 'lines of flight') was my initial attempt to foreground the multiplicity of experience and being in the world, (Carlyle, 2018). By initial playfulness with Deleuze's concept of the diagram I began a creative adventure along a post-structuralist and post-human path.

(b) Conceptualising the study

In developing this thesis, I considered how 'the turn to affect' (as explicated through my engagement with and appreciation of children's geographies' as an expanding area of interest in affect theory) was significant both philosophically and methodologically. As affect is a significant 'state of being' which is often transmitted 'invisibly' it goes unnoticed and undiscovered (Massumi, 2002a). The questions and interests I had around professional change and practice required a research approach and paradigm which could therefore explore and map the possibilities of relations from an affective resonance. Academic writing on the relevance of 'others', in terms of relationships beyond the parent-infant dyad did not seem to address these questions. I was convinced (through long periods of infant/child observations in practice) that the sensory disposition of childhood (embodied emotion) was a mechanism which enabled sophisticated ways of being in the world, albeit intangible, difficult to 'capture', 'translate' and being pre-cognitive. This constitutes what Stern, (1998/2018) has aptly termed a child's 'weatherscape'. I later expand upon Stern's work in Plateau 3. This fascinating 'space in between' ³appeared worthy of further inquiry. I therefore turned to literature which addressed processual aspects of encounters and interactions between bodies⁴. In doing so, drawing on practices of being and becoming, from (inductive) poststructuralism (Deleuze and Guattari, 1994) and ethnographic

³

³ Referring to the precognitive, visceral and corporeal states, inimical to science but agreed as a 'gap' between the individuals affects and its cognition or appraisal of the affective object or situation.

⁴ The term 'bodies' also encompasses non-human or more-than-human (living) things

philosophy (Garfinkel, 1967). These sources of inspiration provided a useful synthesis of ideas to inform both micro and macro (individual and organisational) processes and practices of being and becoming. Throughout this thesis-assemblage I considered how Deleuzian actions could be grounded in creativity and essentially create a process ontology.

My thinking around the approach of ethnography framed my ideas about grasping phenomenon as they unfolded, encapsulating how we *know* things through our five senses: sight, hearing, smell, touch and taste. I considered what phenomenological inquiry attempts to discover, notably the foundations of experiences and how we perceive and recognise (through the senses) the objects and things around us (Gobo, 2008).

At an early stage in the development of my study, I built upon the broad 'framing' of my interests inspired by observational and ethnomethodological approaches by examining studies of practice in cultural and human/children's geographies, essentially incorporating the environment, atmosphere, time and space. My consideration of this material is discussed in the next plateau 2. In addition, I searched for theoretical material that would connect with my own questions and professional meaning making. In my search, I considered theoretical staring points in Actor-Network-Theory, (ANT), (Latour, 2005), Non-Representational Theory, (NRT), (Thrift, 2007), and vitalist philosophy, (Bergson, 2002: In Lee et al, 2014).

I was specifically looking to address notions around how relationships are constantly in a state of flow and flux, emerging, transforming and changing through interactions of children and canines. However, I eventually found that these frameworks were unable to meet *all* of the criteria I was steadily developing for selection of a theoretical lens. These were concerned with the relational aspects of conceptualising and operationalising connections between human and non-human objects creating affect and embodied action. I discovered that it was through deeper understanding of 'intraaction' as outlined by Barad, (2009) that I could synthesise this concept with that of

post-structuralism, post-humanism, new materialism and anthropological, ethnographic inquiry. In Barad's notion and neologism of 'intra-action' she depicts the very nature and essence of relatedness between bodies as something more than *interaction*. This convergence, this connection is what can be seen as a more dynamic means of relations as *production*. She postulates that 'things' do not pre-exist, they are agentially enacted – the material-discursive emergence of the human as it were (Barad, 2009: 150). We are not an inert, abstract or fixed substance, we are a 'thing of doing' (Barad, 2009: 151). Matter is therefore not a *linguistic* construction; it is *discursive* production and acts. Therefore, this fundamental shift in thinking of relationships opens up the possibility of new configurations and understanding in relation to specific social phenomenon such as human-animal intra-actions. It supports a legitimate shift from human exceptionalism which will be explored in more detail in Plateau #3 Methodology and 'Materialising Affect'.

Whilst each perspective was useful in doing at least one of these things, I was not satisfied, that used partially and without adaptation, they would support the type of study I was shaping. What an exploration and critique of these perspectives did alert me to is the development of meaning through social activity and the significance of perspectives on the power of the pre-cognitive, humans' sensuous disposition and assemblages and the way in which knowledge can be acquired. Whilst I used the material, I engaged with this to focus my attention, and to sensitise my lens to certain ways of looking. I continued to consider material cultures and the issues of the affectivity of childhood. It was at this point which I started to read the post-structuralist work of Gilles Deleuze, whose work deals with this area of childhood and 'growing up', becoming child. As I read Deleuze's work I became convinced that I had found a rich source that I could draw upon.

The research site: Shaping questions for the study

Early development of this study focused upon the ways in which childhood affectivity developed in relational *productions* or interactions with others and objects. Essentially this was between children (boys and girls) in Year 6 (10 to 11 year-old's) and Year 4 (7-8 year-olds) in a primary school classroom with their classroom dog, 'Ted'.

My interest was philosophically shaped by Deleuze's work, but also had a practical focus, as I wanted to gain an insight into the embodied actions of children with Dave-Tails-Ted, observing and describing what emerges from this unique encounter.

In light of this, I developed broad research questions to frame the study. These continued to be useful for my own thinking, for participants and to others whom I explained my research to throughout.

These were:

- What kinds of relationships do children form with dogs in schools and classrooms?
- How do children interact with dogs in schools and classrooms?
- What do children understand and say about their interactions with dogs in schools and classrooms?
- What are the affective mechanisms at play in child-dog encounters?
- How can a dog communicate their experiences?

These seemingly simple questions contained for me the idea of embodied actions, connections and moment to moment happenings of children with dogs. They also reflected my conceptualisation of the area of affective encounters and experiences, where one affects the other. Spinoza's, (1985) influential aspect of philosophy taken up by Deleuze, specifically in his trope of Deleuze's rhizome child, with phrases of assemblages, attunement, entanglement, and connectivity, discussed in the ongoing plateaus of this thesis, (Deleuze, 1998). Within the frame of these broad guiding questions, I began to think of my inquiry as broadly ethnographic, having an emergent and flexible methodology to re-enact visually both discursive (peripatetic) organisational practices and experiences. These questions will be revisited in Plateau 4 and be further troubled and discussed in terms of future research implications.

A note on language and thesis format

In drawing on sources from diverse multiple disciplines, terminology became an issue for this study. Deleuze's work alone extensively drew upon multiple sources and traditions in philosophy, social theory, affect theory and others. His use of language

can be somewhat esoteric and peppered with neologisms. I consider this 'creativity' in itself and found myself using new words as I emerged as researcher-becoming-author. However, Deleuzian concepts in true rhizomatic fashion can mean multiple things, therefore I provide my understanding and meaning of these words (both Deleuzian and new) by providing explicit description as I utilise them. Writing on topics of affect and emotion also used varied terminology. Further, discussion of practices involved terminology from children's geographies and new materialism. I found myself navigating between and across disciplinary boundaries, which had both benefits and disadvantages.

Making connections between terminology and disciplinary 'languages' demanded clarity about what was being described and made me aware of possible vagueness in my thinking as well as esoteric, abstract meaning. I had to resolve, as my study progressed, multiple ways of describing the same thing. One key example was the various labels I applied to establish the multi-faceted nature of being, which I identified at times as 'multiplicity', 'vitalist' or a 'sensuous disposition'. As 'rhizomatic' emerging's were borne out of this inquiry from the beginning, that is, to explore my interest in relational process, connectivity and affective capacities, I chose, after much deliberation to use the term 'rhizomatic' as will be seen throughout this thesis. Consequently, an explanation of key words, terms and meanings is employed and provided through a glossary of terms, (p. xvii-xix) both my own and others. In addition, it became emergent that there was not only a rhizomatic flow in my writing, but also a rhythm to it as I attuned to the rhythms of the research site and unfolding phenomenon. This later developed into a 'rhythmanalysis' of the data and as such I include musical terms within my glossary. The use of musical terms became very fitting as new insights were gained from the perspective of viewing relationships through a lens of movements which are choreographed in specific ways as a result of affect attunements. In doing so, they are not reductive or codified and thus highlight kinaesthetic patterns and rhythms evident in intra-actions and relationships. In this sense, a greater appreciation of the 'musicality' of communication and companionship is afforded (Malloch and Trevarthern, 2009).

What is a rhizome?

The concept of the rhizome is peppered throughout the work of Deleuze. It is perhaps the most used metaphor which is synonymous with his 'radical' ideas pertaining to existence. This botanical metaphor is superbly recognisable as an evolutionary, even Darwinian, explanation to how we move and interact in the world around us.

The fractures, ruptures then repair of our

'rhizomes' offer a delightful way with which to explore and describe the many challenges of life (human and non-human) in a dynamic, meaningful and vitalistic manner. The journey of the rhizome, in its expansion, growth, and sometimes fracture (breaking off) to attach to a new stem, can

be used to articulate the very essence of this thesis and research process. It unfurls in accordance with favourable conditions, hence, becoming rhizomatic refers to a production and performative endeavour. As such, it provides a major departure from linear, structured thinking. It affords non-linear, unstructured pathways of knowing. Such an approach can be seen as deconstructive, critical and post-structuralist. Deleuze and Guattari articulate the conditions for this epistemological positioning and 'smooth space' as opposed to a 'striated space', to enable cultivation of new ways of thinking:

'The striated is that which intertwines fixed and variable elements, produces an order and succession of distinct forms, and organises horizontal melodic lines and vertical harmonic planes. The smooth is the continuous variation, continuous development of form; it is the *fusion of harmony and melody* (own emphasis) in favour of the production of properly *rhythmic* (own emphasis) values, the pure act of the drawing of a diagonal across the vertical and the horizontal'. (Deleuze and Guattari, 1987/2013: 556)

Rhizomatic and diffractive structure of the thesis: A thesis-assemblage

This thesis embraces a rhizomatic augmentation of children's lived experiences with a canine in their classroom. It is a rhizo-thesis. In keeping with the philosophy of Deleuze and Guattari, which have underpinned this process, I set out and propagate plateaus as an alternative structure to conventional chapters. These plateaus were emergent throughout this thesis journey and each plateau works on non-linearity as an assemblage telling the story of the research as it unfolds. In this sense it has dispensed with the linearity of conventional academic writing. Inspired by the writings and creative prose of Sellers, (2015, 2013); Bailey, (2017), and Sousanis, (2017), I concur that my research is a research rhizome and that I am applying operations of research and rhizome working together. This less structured venture resists 'flattening' and concretising emerging figurations, animations, re-enactments and events. The concept of 'unflattening' (Sousanis, 2015) has been fundamental to my research design as this has enabled a collection of visual data, other than textual documentation, which potentially opened up new understandings of human encounters, experience and embodied emotion; by showing, telling and illustrating key events emergent in my fieldwork. This two-dimensional flavour allows for the affective nature of the research to manifest as readers intra-act with both text and image. This discursive process in itself will potentially convey the dynamic relations witnessed and recounted from both the child-dog and ethnographer-dog events.

Through recalling Deleuze and Guattaris' seminal work 'A Thousand Plateaus', I also wish to invite the reader to choose their own pathway as you read, mapping your own journey and way through. This pathway may resonate with your particular interests, as they are currently and as they emerge concurrently in the reading. Therefore, there is no set order in which to read the plateaus but an initial suggestion that this plateau (echoes from the plane) be read first as it elucidates the Deleuze and Guattari imaginaries utilised throughout.

My consideration of

pluralism

in practice has been explored within a therapeutic realm (Carlyle, 2017) and this appreciation of how concepts intersect, connect and align with one another to form a field within surrounding fields, creates a

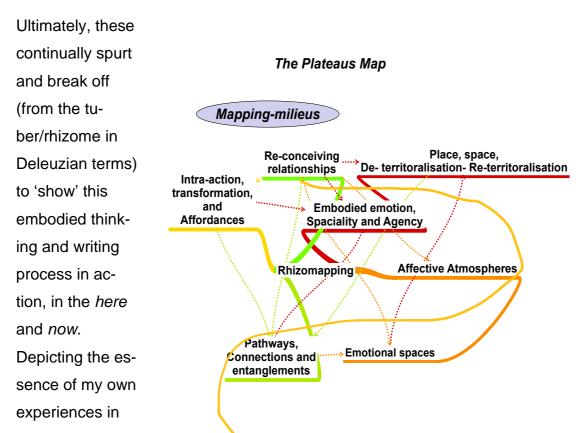
'plane of immanence'

(May 1997: 5 in Watson et al 2012)- see page 25 'Plateau Map'. The Deleuzian plane is comparable to discursive practice, and manifests through the bringing together of diverse and often disparate, heterogenous elements into a whole, where they are inseparable

Plane of Immanence

from one another (as discussed in therapeutic modalities linked to cognitions, schema's, systemics, and psychodynamics- see Carfyle 2017). This way of seeing enables new (re)configurations to emerge and unfold. Its multiple patterning follows new lines of inquiry in an effort to 'unflatten' the experiences of both 'being' and 'becoming' in the social field. It is deconstructive and diffracting (cutting-apart-back-together), in resonance with Smartt 's (2019) diffractive approach to ethnography. As my own 'lines of flight' and expansion of thinking occurred, these visual imageries became material images with which I could engage with and experience as corporeal.

Deleuze Ingold



the research process became key to its epistemological positioning. It also alerts us to the temporality, and spatiality of experience, a crucial consideration when considering subjectivity. Perhaps the brain is the best example of how as an organ, it is not fixed or static. Yet, neuroscience imagery is precisely producing just that – a fixed moment, a moment which is then 'flattened' (Schmitz and Hoppner, 2014). Indeed, it can be argued, that my own sketches could also be fulfilling the same function. How we consider them depends on how we hold and view their positions, it is an 'image of thought' to find ways of describing what we have seen, *mapping*, not tracing

Mapping milieu(s): Relationships as milieu(s). This depicts the alternative approach to this thesis-assemblage; as rhizome, the plateaus are emergent and thus have no linear beginning or end structure (as in chapters) but instead connect, flow, and fold into one another, creating milieus (middles) – always becoming something else.

These then become **plateaus-planomenons** which expand into a '**plane of consistency and immanence**'- an integration and intersection of concepts and points in a field which are non-representational.

From chaos, Milieus and Rhythms are born.

(Deleuze and Guattari, 1987: 313)

However, the fundamental difference is a philosophical one and one which is always changing, becoming and evolving (as the mapping shows) through a lens which is pluralistic and de-constructive. The flow and intensities of these sketches and affects I call 'etudes', rhythmical drawing exercises to encapsulate my embodied perceptions and sensory input into meaningful aspects of conscious experience. The very process of writing, like experience, is inevitably always 'becoming' and becomes something more, it is in constant **process**, it is never finite. Folding and unfolding of events into one another. The inside and outside always entangled, always 'more than one', a meshwork of encounters and experiences, (Manning, 2013). This is invariably why the issue of the 'subject' is a thorny one. I further explore this in Plateau #3 Opus and Fugue (methodology) and problematize its significance with regard to Spinoza's and Deleuze's philosophy and rumination on phenomenology. My thesis is a radical pluralism in itself, as I take on board other insights from other multi-disciplinary fields (post-structuralism, geography, psychoanalysis and psychodynamics, new materialism and post humanism) to refine my conceptual and theoretical framework, protocol and 'toolkit', as it were. It is therefore not abstract and opaque, but a social ontology which rejects anthropocentric and individualistic views of the world because predominant thinking neglects relevant non-human factors in the social world. Similar to Epstein's (2015) pluralism in his innovative 'Ant Trap', I endorse a theoretical and conceptual framework which can be considered as aligned minds, all be it, diffractive ones (between Deleuze & Guattari, (1987/2013), Barad, (2007), and Ingold, 2016).

The visual learner and ethnographic apprentice

My engagement with 'visuals' has been an incumbent one and one in which both my personal and professional worlds merge and mingle together. I have long appreciated my need to see things to aid my full understanding of them. This memory was

brought into further significance as I commenced teaching in Higher Education. I noticed my preference for explaining things with diagrams, maps, images and material objects. You could say I was the very definition of a 'visual' learner (Mayer and Massa, 2013). This also involved a tactile process, and I was often jokingly chided by my dear mother for touching everything in the aisles when out shopping. In retrospect this banal or 'quirky' part of me was something of my embodied need to *sense* the world around me. Like many other children, the need to *feel* (or touch) seemed a fundamental part of 'growing up'. As Haraway aptly refers to this as 'fingery eyes' (Haraway, 2008:4) I will return to this in subsequent plateaus and its connection to our seeking of sensory perception and pleasure that ties us not only to our human kin, but also our canine kin.

This aspect of 'being' in the world now seemed to take on greater significance for me as a 'becoming-lecturer' and 'becoming-researcher' and I was thrilled to fully embrace its embodied significance and the opportunity it afforded me. Despite my 'rusty' beginnings in returning to sketching and art, this part of my journey has opened up new ways of understanding that I could not have foreseen through any other means. Tapping into this side of my learning seemed a natural and important aspect of my research journey. In doing so it added a new dimension to my practice and research. It seemed to enliven the process in its very materiality and through use of text alongside sketches I gained deeper meaning and understanding. So begins my imaginings...

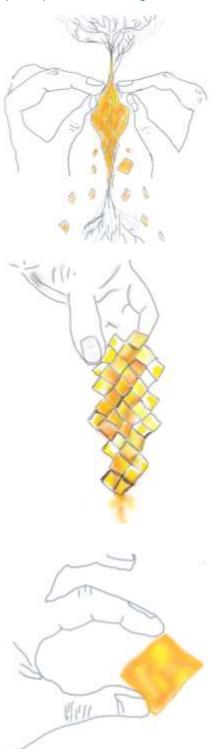
What is a plateau?

Intrigued by the ideas of Deleuze and Guattari in their seminal works 'A Thousand Plateaus' I used sketches on my new Wacom to help me negotiate the complexity and density of the philosophical text in order to understand their concepts more. I also engaged with the captivating visual depiction of a thousand plateaus by Marc Ngui, (2016) to aid this process. This provided for me significant affirmation that my idea of rough sketches (which I later call 'etudes' as seen here) could enable not only an enhancement of my knowledge around Deleuze-Guattari philosophy, but also allow 'etudes' to become a powerful embodied visual medium as 'documentation' (with which to think and engage with) in regard to my research design (for both myself as ethnographer and the participants involved). Pulling apart and opening up the rhizome reveals thousands of segments, with each segment contains further multiple segments.

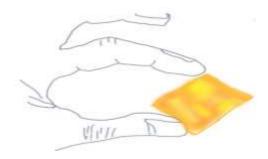
The enthusiasm of both my supervisors for such a design (my Principal Supervisor also being an artist, and my second supervisor being a Human Geographer) endorsed this and inspired me further. Without doubt, this support enabled a creative and liberated approach to my learning and opened up new possibilities and potentialities for myself as a researcher.

Picturing and imagery of a plateau through my "etudes"

Pulling apart the rhizome opens up the plateau and segments



My emerging imagery of a plateau



As my picturing of a plateau depicts, this also involves an opening-up of the plateauhoneycomb to discover (thousands of) concepts, data and new knowledge within each segment. Thus, there are multiple ways of seeing things.

'A Plateau is a continuous, self-vibrating region of intensities....

(Deleuze and Guattari, 1987:22)

"..reached when circumstances combine to bring an activity to a pitch of intensity that is not automatically dissipated in a climax"

(Massumi, cited in Deleuze and Guattari, 1987: xiv)

The plateau following this introduction is a wayfaring (walking, navigating) through (a review) of the literature relevant to the study. Therefore, I offer a more specific consideration of the area of inquiry which seeks to explore the relational processes and affective capacities between children and dogs. As this process unfolds as embodied action which constitutes a vitality and *presence*, Plateau 1 Part Two, Concerto, I explore the idea of 'reconceiving relationships' and this exemplifies the materiality of children's cultures and practices as well as the cultural significance of dogs. I unravel issues of vitality, corporality and embodied emotions. Swirling around these issues are aspects of relationality, kinship and co-existence. It is the integration of these themes which contextualises the study and directs its literature review to encompass the disciplinary, pedagogic and phenomenological lens on affect theory. I identify the necessity to adopt a 'More Than Human' (MTH) perspective, sharing a conviction with Whatmore (2002), that we need to cross boundaries between human

and physical geographies to allow for a multitude of different ways of knowing skills; sensitivities and presences in the process of co-fabricating socio-material worlds. MTH agencies inscribe social and spatial worlds learning to read another's presence as one of *diagramming*, rather than *representing*, (Zdebik, 2012). This directly equates to the Deleuzian idea of the diagram as a means of showing and telling (in this instance through sketching, drawing, arts and crafts) the emergent story of the children's encounters with classroom dog 'Ted'. This in itself advocates an ethnomethodology and indeed ethno-mimesis (narrative and art becoming transformative spaces for growth) as the study's focus is to generate detailed, rich descriptions and imaginaries of interactions, relationships and networks, diagramming these everyday practices derived from the process of learning to be affected by another as well as affecting others (Massumi, 2002a).

From Echoes to Etudes: epistemological positioning

As participant-observer and researcher-becoming-child, becoming-pupil, becomingdrawer, I also show and tell my journey and embodied experiences through the use of a series of 'etudes' alongside the children's artwork creations. I utilize these 'etudes' throughout my thesis, as not an aesthetic addition, but as an attempt to animate Deleuze's practical philosophy and emergence of affective influences. Hence, I have not numbered the etudes as in traditional writings, as they portray their own rhythm and I wish to emphasize non-representation of affective moments from the outset, (Thrift, 2007). These etudes can be referred to as my 'visual vocabulary' (LeBreton 2017: 11). Etudes, in this instance are a series of drawing exercises suggested by Causey, (2017) which can supplement and enhance fieldwork observation in ethnography. As 'seeing' is my primary goal (not being artistic) I am attempting to try and improve my perception of the unfolding events within the classroom through using etudes as 'notes'. They can be a useful tool to aid memory of events when reflecting on observations. Although associated primarily with musical etudes this technique remains very appropriate and significant for this research as the unfolding rhythms and tones emerging in the 'musicality' and movement of communication are depicted visually (Malloch and Trevarthern, (2009); Trevarthern, (1999); Edensor,(2010); McCormack, (2002) and Bailey, (2016)).

By being 'drawn to see' I show the vibrancy and morphing of imaginaries not possible through textual means. Furthermore, these etudes challenge and push me as an ethnographer using post-structuralism to 'see beyond the surface' and below the lines, fusing words and images to produce new forms of understanding and knowledge (Causey, 2017:114). Through the medium of drawing I am able to access modes of understanding beyond what I can normally perceive. These etudes are visual documentation systems which act as structures for what I am seeing. It has allowed me to connect sensually with the environment and practice an honesty, curiosity and respect for the research and participants in a refreshingly joyful way. As such these 'etudes' are an attempt to unflatten text through illustration of it, avoiding the linear and rigid thinking that Sousanis calls flatness, (Sousanis, 2016) This technique also allows me to demonstrate the synergy and weaving together of the concepts and ideas deployed throughout this thesis-assemblage from the writing of Deleuze and Guattari, 1987/2013) Barad, (2007) and Ingold, (2016) essentially intermingling and synthesising science, art, philosophy and literature throughout, and creating new lines of flight for the reader.

My use of etudes is also similar to Deleuze's ideas of images (or 'simulacara'). This method is a way of recording appearances and events of simulation and experience (Deleuze cited by Colebrook (2002b: 6). Like Deleuze's critique of modern cinema, I re-create through my etudes (kinetic-bodily movements, rhythms and melodies) images freed to a certain degree, from the human eye and organising perspective. In adopting etudes, I utilise a relational ontology and cinematic way of 'seeing' in a more-than-human and multiple way. It moves away from something I witness to something I inscribe. It is a performative and embodied process to allow for a different way of seeing, a different kind of ethnography. Cinematic cuts offer a diffractive ethnography and as the example of Warfield highlights, the self-image or 'selfie' is useful to consider in terms of what makes the "cut" is something which emerges through apparatus (the camera for example) and bodily production, (Warfield,2016). More importantly, this encourages us to think beyond our own roles, and as researchers to question the demarcations of boundaries as in agential realism we are not separate entities but entangled together, coming into being through one another.

This also departs from the dominant use of language and linguistic structures, giving experience liberation through non-representation.

In Plateau #3 'Opus and Fugue', the notion and magnitude of 'unflattening' is considered in greater depth when devising the research protocol for participants tasks and enactments.

Coming to our senses: more than five (including a dog's voice and a note on his name)

As I expand upon my conceptual and theoretical framework, you will find a rhizomatic reading here helpful. By this I suggest it can entail the reader engaging a 'back and forth' navigation between both this 'setting the scene' plateau in how I aspire to understand the research phenomenon and the methods I utilize to do so – an onto-epistemology. You will find they do indeed slip and slide into one another, as is the way of Deleuzian rhizomatic 'thinking'. This is an approach with which I found my 'methodology' emerging from my own story and clinical practice.

In addition to the use of etudes to enable a sharper perceptual gaze and embodied way of knowing child-dog interactions, I also attempt to elucidate the significance of the senses in this social phenomenon. This ontological and epistemological positioning requires greater apprehension of both human and non-human sensory processing. For humans the standard taxonomy is not simply our five senses – vision, hearing, touch, smell, and taste, (Schwartz and Krantz, 2016). Humans have anywhere from 7 -12 different sensory systems (depending on how the different touch systems are counted). These are vestibular, proprioception, nociception (pain), itch, heat, cold, pressure, touch, taste, smell, hearing, and vision. Sensations from our nervous system provide information which can then be perceived (turned into meaningful conscious experience). Thus, perception refers to how we process stimuli into a usable image or experience. This aspect of both human and non-human nature is important to this study in so far as it provides the corporeal and embodied details of intra-action, often unseen or not considered.

Invariably the **olfactory prowess** of dogs, having 10 times more than the human 20 million receptor neurons, (Schwartz and Krantz 2016) will be a



meaningful consideration for the research process as it has implications for understanding the praxis of canine communication. Dave-Tails-Ted's 'umwelt' plays a key role, that is, how he experiences and engages in the environment around him differently to humans (von Uexkull, 1992). In addition to powerful senses of smell, dogs also have a two-cone system of vision (seeing in colour deficient of just red and green) so they see the environment differently, from a differing perspective.



Y6 Classroom (research site) -seen through canine 'eyes'

Movement and proprioception then become worthy patterns aesthetically, to trace and diagram.

In addition, the **Olfactory prowess** of dogs offers ways of attuning to a non-human or more-than-human experiencing of the world and what I call dog 'words' and communication. Ted's way of identifying the children through a particular

scent is visually depicted in my etudes and pentimento below which shows how sniffing a door handle can conjure up many 'images' of 'thought' (dog cognition) for Ted as he deciphers and makes sense of the environ-

ment and

classroom.

I also concur with Sousanis in how he depicts dogs as having 'access





to layers of time', in his points of interest from his webinar, (Sousanis, 2020). I have attempted to depict this visually through layers of tracing paper, (see below). What this enables is further progress towards a zoontology and the appreciation of differing umwelts, from a temporality standpoint and how time can be sliced, cut and folded in on integrating the notions of Baradian and Deleuzo-Guattarian ideas of agential realism and actual and virtual elements of experience. This is further elaborated on in Plateau # 3 in my use of pentimento's and further layering examples (see 'Entanglements').







Throughout this thesis-assemblage I have endeavoured to ensure a canines voice. Part of my ethnographic presence was inevitably intertwined with the classroom dog and involved a 'deep hanging out together', (Powell and Somerville, 2020: 849). I gave him the name and the pseudonym of 'Dave', in considering ethically his need alongside the children for anonymity. However, this became an unexpected problem as the research unfolded and alternative names for 'Dave' were considered by the children in their comic creation. The children named Dave 'Tails'. A collective idea and one in which I consider aptly reflects their storying and 'tale' of them sharing a classroom with him. Surprising to me was how I regularly struggled with Dave's name and called him by his family name 'Ted' (in conversations, papers, and presentations). Editors told me they had no preference for his name, and it became something of a dilemma. As I pondered over this, I came to a point of viewing Ted as all three. If I remain true to the actual and virtual aspects of Deleuzian philosophy as (I have attempted in my own metamorphosis becoming-researcher-ethnographer-childpupil- see Plateau # 3 Part E) then the same parallel process was emerging for Ted. I therefore refer to Ted as 'Ted', 'Dave', and 'Tails', as I slip-slide through actualvirtual time with him. I also wished to have his 'voice' recognized in the research as interest about his presence in the school and classroom grew. The class teacher was contacted many times by other schools about the process and experience of having a dog in a classroom and school. In my humble opinion I consider that the school therefore became something of a 'flagship' school in terms of new, innovative practice, (TES, 2018). Initially the name Ted – which was an abbreviation of 'Ted

the Educational Dog' felt inappropriate for me to use, not wanting to assign to Ted any fixed identity, however, as I have already stated, through time, this indeed emerged (as you will discover) as he became a 'pedadog', affording the children many ways of becoming and learning (Young and Bone, 2020). It must be borne in mind, though, that this is only one aspect of Ted's way of being and becoming. He too is a vector of entanglements, and thus creates a multiplicity of becomings, connections and identities

Ethical Etude:

Principle of anonymity of Ted

As I became part of the classroom culture I began to struggle with the name of 'Dave' – the pseudonym I gave Ted to protect his identity. I have referred to him as 'Dave' in my initial published papers. However, as I entered a 'deep hanging out' with Ted and the children the need to acknowledge his relationship and true name became fitting. This was something of a dilemma for me at first. But as he became known for his wellbeing benefits to the children through interest from the Times Education Supplement following the teachers attendance at the awards in London, it seemed fitting that I referred to him as 'Ted'. Ted was also given a Facebook account so that the children could connect with him outside of school. As he entered this more public realm and became something of a 'trailblazer' for having a dog in a school, my dilemma eased somewhat.

Shifting perspective to embodiment and the corporeality of relationships

The perceptive writings of Deborah Lupton have been a springboard for enhancing my ideas around the significance of our senses in how we relate to the world and one another. Her discussion around infant embodiment highlights this as an area where there is little evidence and literature in Western society (ontologically) regarding how children experience through embodied interactions. She coins the term 'skinship' (Lupton, 2013:7) to try and denote its significance. The idea of skin-to-skin contact between mothers and babies during breast-feeding and father's having skin-

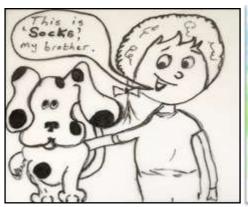
to-skin contact at the birthing scene are given as prime examples. She also endorses the relevance of touch for the infant, as well as 'rough and tumble' play. She describes the two-sided nature (doubling) of human embodiment, how both parent and infant are active participants in the inter-corporeal nature of their relationship. She describes through touching the spatial aspects of being touched as an embodied encounter which facilitates both closeness and distance, 'moving-being moved, feeling-being felt, hearing-being heard, the bodies of the mother and infant come close, or bond to each other then spread away from each other, (Lupton, 2013:7).

Merleau-Ponty, (1968) also emphasises consideration of the importance of affectual encounters, and in his rejection of Cartesian accounts of humanity, strengthens the argument for the body being given great attention. He terms this 'coupling' – grasping the intention of another's body. This interesting concept will be expanded upon and considered in parallel with Lupton's, (2013) idea 'doubling' and Deleuze and Guattari's, (1987/2013) notion of 'doubling' and 'becoming-

with'...

Rosie and Socks.

Orchid and Wasp.





As Merleau-Ponty, (1962) asserts, our basic ability to understand others is perceptual, sensorimotor and non-conceptual. This developmentally precedes the cognitive capacity know as 'theory of mind' (Premack and Woodruff, 1978). This consideration of sensorimotor capacity plays a significant part in this thesis-assemblage and its methodology, as it endeavours to understand the meanings and embodied actions between children and their classroom dog, Ted. Erin Manning, (2009) offers further contributions to the field of inter-corporality and in-



ter-embodiment by thinking of bodies as 'leaky bodies' and 'relationscapes' and these helpful, intriguing and provocative ideas will be explored in the following Plateau 1 Part two, Concerto.

A starting point - the aesthetics of cute, cuddly, and non-human charisma

When we consider animals and children they are often perceived as 'cute' and 'cud-dly', possessing the engaging features of big eyes, noses and round faces. Lorenz in the 1940's extensively studied this cross-species cute characteristic, calling it 'child schema', which continues to prevail in the developmental literature. This evolutionary and aesthetic nature of eliciting care-giving and compassionate behaviours has been fundamental to the development of both species. Babies quickly learn to smile, although a reflex initially, its delighted response from the parent ensures continued closeness and nurturing. Similarly, the pioneering experiment of Siberian silver foxes (Trut, Oskina and Kharlamova, 2009) and their 'domestication' gave a remarkable insight into how these captive foxes developed less aggressive behaviours, more likeable traits and features whilst with their human researchers, ultimately showing changes in their actual DNA through differing patterns of gene expression, similar to that which Balbernie, (2001) discusses in his ideas around inter-generational trans-

mission of trauma or attachment patterns and the fundamental role of the environment. The incredible trope of cuteness and cuddliness suggests that the ability of dogs to understand human gestures is an innate, inborn, trait as a direct result of their human domestication.

Cuteness can then be viewed as something of a disarming mechanism, crucial to survival and a feature which 'engenders an intimacy between subject and object' (Dale et al 2017: 178). This has also culminated in the notion of humans attributing human characteristic to objects and animals, known as 'anthropomorphism'. It is at this juxtaposition that things become complex and interesting within the literature, with anthropomorphism taking on a new mantle, perhaps challenging human exceptionalism, as it has been found that specific animals (for example dogs and parrots) do indeed possess cognition or have a 'mind' of their own (Menor-Campos, Hawkins, and Williams, 2018) according to children's perceptions, therefore moving discourses into the important realms of post-humanism and new materialism. Not only do children and animals share an innate biological pre-programming for evolutionary survival, they are also connected and entangled through a shared material culture. Such an affinity is not to be overlooked or underestimated. Lorimer, (2007) has explored the notion of non-human charisma from a non-human or 'more-than-human' geographies perspective, with insightful reflections on how 'cuteness' is a pervasive concern in addition to the companion relationships elephants have forged in Sri Lankan communities, (2010). He helpfully meanders through the idea of non-human (cute) charisma and how our multi-species relationships are borne out of many other factors related to culture and individual preference. This raises important issues of relational agency and a reduction of the differences between humans and non-humans to ontological monism (reducing reality to only one type). The lack of appreciation of the corporeal and perhaps vitalistic capacities and potentiality of differing bodies is overlooked. This perceptive appraisal by Lorimer, (2007) has enabled this research to take a multi-dimensional approach to human-animal interactions, cutting across disciplines in a pluralistic sense to go beyond current discourse which does not always account for what Deleuze terms 'multiplicity'. It is therefore a crucial forming and renewing of myself as an ethical subject and researcher. As Lorimer (2007: 927)

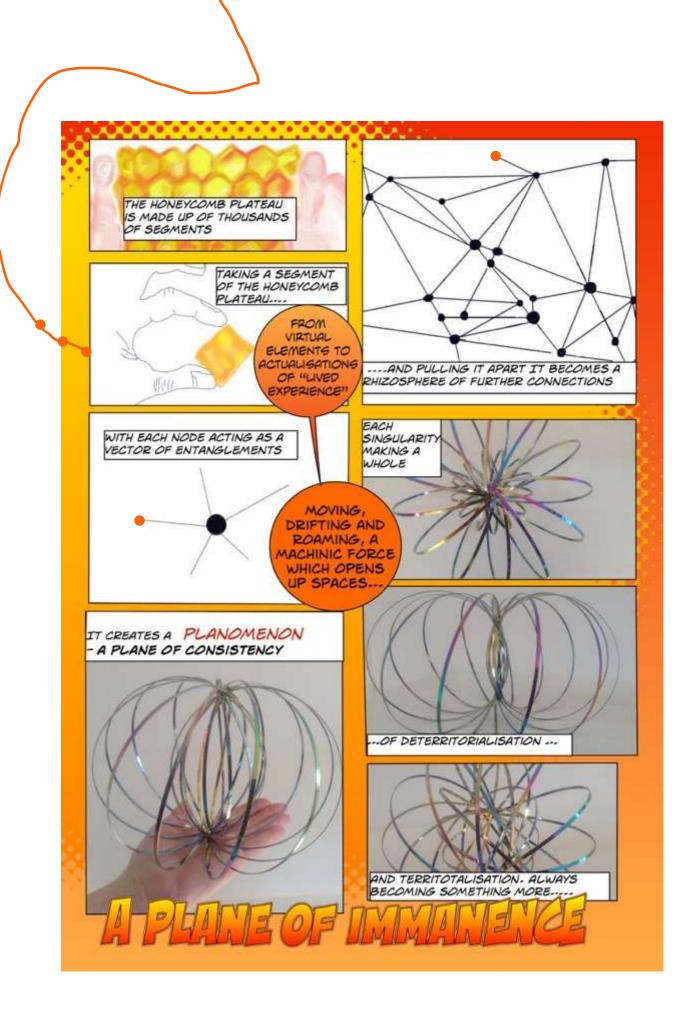
states 'ontologically, non-human charisma blurs the modern subject-object dualism', in doing so I disrupt this dualism to provide a fresh understanding of non-human agency by opening up my observations and reflections to the great diversity of non-human performance or enactment in relationships with humans. This provides me with a powerful force linked to visceral and aesthetic relational properties. As Sheets-Johnson, (2009) asserts, by bringing the body back into discourse, thinking about the primacy of movement, we allow for a greater depth of appreciation of existence and relationships form a non-linguistic perspective.

The next plateau, Plateau 1 Part two, 'concerto', is an exploration and review of the current literature related to human-animal interactions and I argue that a theoretical framework is required which addresses childhood affectivity and is connected to participants and social practices. This plateau 'Reconceiving relationships and attachment theory (children becoming entangled- vitalistc- agentic 'vectors' through intraaction with 'Ted') develops a theoretical and conceptual framework for this thesis, drawing on Deleuze's ideas on childhood and the 'rhizome' child. I present this work as an interpretive resource for the study, not a comprehensive statement of Deleuze's work on childhood. I present Deleuze's work as an important adaption, even a departure from that of phenomenology, which draws on resources from thinking about space, place, bodies and affect theory. I also indicate how Deleuze's consideration of time; past, present and future, helps provide specific resources for this thesis. This plateau shows how specific ideas offered by Deleuze on the subject of becoming contribute to a notion of the child as being in a constant flux of deterritorisation and reterritorialization. The focal point of this plateau emerges in my adaption and re-purposing of Deleuze's (1988/1994) rhizomatic child as not only a model of affective response but also as a *vector of entanglements*, (see lines of flight: vitalism). This emerges through the creation of synergy between the writings of Deleuze and Guattari, (1987/2013), Barad, (2007), and Ingold, (2016). Through these complementary, albeit seemingly disparate writings, 'lines of flight' surfaced, crisscrossed and connected in my thesis-assemblage as it was materialised into an operational theoretical and conceptual framework.

In true Deleuzian style, it is not so much a theoretical framework in itself but a synthesis and series of key concepts that informed the details and formation of my methodological process. I have prefigured my clinical practice in the synergy between text and image to detail the many experiences which have manifest in productive spaces. This virtual transformative process in practice has now become entangled in my process of becoming-researcher as actualizing them.

Following the theoretical and conceptual framework for this thesis-assemblage, I progress through Plateau 1Part B – Concerto. I then move to Plateau 2, Ensemble, (methodology) in which ethical considerations and sampling are included. The next plateau is Plateau 3- Opus & Fugue (data collection and data rhizo and rhythmanalysis) culminating in a 'rhizopoesis' (playfulness, creation, bringing into being, making) which presents the materialising of affect, and finally Plateau 4, The Rhapsody-Refrain, which details my findings, discussion, and contribution to practice.

The integration of musical terms became an emergent and integral part of this thesis as I engaged with the rhythms and flows of 'lived experience' in an embodied process. As such this is reflected throughout in my writing and sketching (etudes) as rhythmic flows, and I invite readers to engage with the thesis in a similar way being guided by your own rhythmic flows and lines of flight.



Plateau #1, Part B, Concerto

Wayfaring through the literature



Reconceiving Relationships and attachment theory as assemblages and entanglements: A conceptual framework becoming-with-the-literature

'All knowledge, the totality of all questions and all answers, is contained in the dog. If one could but realize this knowledge, if one could but bring it into the light of day, if we dogs would but own that we know infinitely more than we admit to ourselves!' (Franz Kafka, 1971:321)

Introduction

This plateau forms another part of my journey to rhizo-connect with and make sense of affect 'theory' and its relevance to children's interactions with dogs; I have foreshadowed affect in my previous plateau (intermezzo) and how it can be considered rather elusive and invisible in its transmission from one thing to another. However, this is not an impassive, objective journey through all potential literature that could relate to human-canine bonds primarily in children. As rhizome research, it became a 'slip sliding' between free-flowing thinking, less structured and linear thinking (see Marc Nagui, 2013 p. 11). In this sense, in similarity with philosophers such as Henri Bergson, (1950), Baruch Spinoza,(1985) and Giles Deleuze and Felix Guattari, (1987/2013), it results from engagement and conversations with contrasting discourses found in a range of disciplines, which are utilised as a resource. This endeavour is one with purpose, which is to address the questions about what emerges from child-dog interactions which I set out in the previous opening plateau. Concepts discussed in each of the plateau 'segments' that follow is characterised by the idea of shifting contextual boundaries, where topics are traced across different bodies of literature and ways of thinking. Consequently, I make rhizo-connections across diverse sources and traditions, not just tracing but mapping and diagramming them, in my efforts to explore child-dog assemblages and its relevance to childhood becoming, wellbeing and education. In addition, I emphasise that this plateau is not an exhaustive review of all literature related to child-animal relationships but is a summary and discussion of key themes and sources that inform the thesis-assemblage. It is also a catalyst for the research's evolving theoretical framework (methodological positioning) as I continue to produce a map which expands and offshoots as lines of segmentarity into all sorts of dimensions in true Deleuzian fashion (as shown in etudes 'picturing a plateau' in Plateau #1 Part A Intermezzo).

To contextualise the plateau, I begin with a brief consideration of the topic of affect itself as presented across many different types of discipline and subject. In this introduction to the subject, I identify the nature of affect as a key aspect in human-non-human relations, thus providing a context for child-dog encounters. I then add a material and cultural context for this thesis by examining the material culture of children and the cultural significance of dogs. Here I indicate an early intention to identify the way in which child-dog relationships are working within settings and how they have been subject to certain sorts of critiques. Additionally, I trace the significance of 'others' in terms of the dominant discourse of attachment theory and how 'others' or 'otherness' is relevant to the inquiry, (Haraway, 2003). From this point, I examine the potential of children's material cultures to speak to my research questions. Here, my assessment is that the complexity of the idea of affective capacity is eroded by the suggested 'unit of analysis' and measures of relationships through the limited lens of attachment patterns (and hence, quantifiable and positivist epistemology of the literature). Therefore, I review assumptions about the nature of child-dog interactions that are left unexamined in much of the literature, (Melson, 2003).

I then turn to literature that deals with the cultural significance of dogs as I seek to inform my questions about the unique relationship they have with humans and what constitutes this. The discipline of children's geographies provides some context for my questions about how children 'grow up' in the context of

influential relationships, viewing this from an essentially, place, space and temporal paradigm of practice. In reviewing this body of literature, the significance of children's 'bodies' as an active context for individual action is considered. This is also an area, which has been left comparatively unexplored in much of the literature, (Holloway and Valentine, 2000; Valentine 2010). Specifically, I examine post-human, (Haraway, 2008) and more-than-human perspectives, (Whatmore, 1997, 2002, 2006).

In moving from the context of children's place, space and temporality, I review the literature dealing with animals and attachment theory, and well-being. Here, the literature begins to relate affect and child-dog interactions/practices in helpful ways, but I argue that the explanatory power of this material is limited, given the abstract nature of some of the material or the assumptions it makes in relation to the nature of 'being'. Finally, I note the way some phenomenological work identifies broad concepts that inform the study, but also how its questions of attachment and education and health benefits (of child-dog interactions) fail to inform questions for this thesis-assemblage.

As this plateau progresses, I identify the influence of Non-Representational Theory (NRT) which supports my critical engagement with affect and the relational discursive practices in this study, (Anderson and Harrison, 2016). Morethan-human geography and NRT inscribe social and spatial worlds in learning to read another's presence as one of *diagramming* rather than *representing* them. Relational ontologies provide the idea that the world is a complex and precarious achievement. Taking account of NRT, then, will direct my own enquiry of how relationships and interactions emerge between children and dogs and what participants say about them.

In the final section of this plateau, I look at materials that have the potential to address representational concerns with the 'capturing' or more appropriately

'materialising' and 'animating' of affect and how this can be illuminated in practice. Consequently, I argue the case for an adaption of hermeneutic philosophy that attends to the practical and visual ideas of ethnomethodology.

Affect as a conceptual-theoretical framework

Affect is a key element of this thesis-assemblage as the affect from a child-dog intra-action can be said to align with Barad's (2007) onto-epistomological framework of 'agential realism' that is, seeing the world and how it is made up of entanglements of 'social' and 'natural' agencies. Essentially, it is not just about reflection on science and practice but a 'doing' of science, animating and materialising practices. Her critical social theory (feminist and post-structuralist) does not see epistemology and ontology as separate in the world but as a whole, linking fundamentally with ethics. Thus, the distinction of 'intra-action' as opposed to 'inter-action' is made. Intra-action and activity help re-frame the dynamism of relations and reconfigure them as spaces of time and matter which she terms 'space-time-mattering'. Barad's ongoing influence will be discussed throughout this thesis, and in detail in the next 'rhizopoesis' methodology (Plateau #2 Ensemble). The rejection of a corresponding relation between words and things for a causal explanation of how discursive practices are related to material phenomenon helps sensitise my lens to focus on these cultural practices (child-dog encounters) and leave behind the irrelevant forms of social constructivism. This illuminates how material practice come to matter, thus:

'Continuously through time, the brain is processing and integrating sensory information from the world, somatovisceral information from the body, and prior knowledge about objects and situations to produce an affective state that is bound to a particular situational meaning, as well as a disposition to act in a particular way....' (Barrett, et al 2007: 386.)

This large and diverse body of literature on the topic of *affect/emotion* and human-animal bonds is a context for what follows in this plateau. I begin by identifying particular concerns and themes relevant to this study, moving from general work on affect to more specific links which define its relevance for the contemporary study of children growing up with dogs.

The following etudes, woven alongside text, helped me to consider the immense propensity of affect and being affected through Barad's elucidation of 'intra-action' in order to conceptualise this when exploring social phenomenon. The favourite image of thought contemplated by Deleuze of the orchid and wasp depicts the creation of 'becoming' or symbiotic emergent unit. Through their intra-action the orchid and wasp both attain their independence (ontological status), producing pollination, procreation (transformation) and in the case of bees, honey.

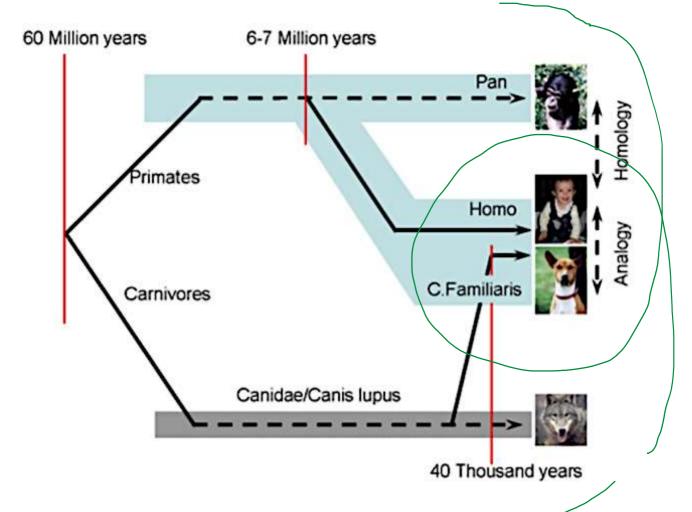


Ethnographers etude and photograph from observation of 'symbiotic unit'- seeing co-constitution



Teacher-dog symbiotic unit emergent in the classroom

In addition, by considering the image of a phylogenetic tree the co-existing relationships among species and their ecological emergence and lines can beshown, (Ingold 2016). As we can envision, approximately 40,000 years ago, dogs entered the human social environment. Hence we have been entangled



(Source: Kubinyi, Viranyl, and Miklosi, 2007: 27).

Becoming-withness:

What is 'becoming' and 'becoming with?'

The notion of 'becoming 'is an important one which is threaded throughout Deleuze and Guattari's philosophical thinking around life and creation. Here Deleuze and Guattari (1987/2013) challenge the dichotomy of childhood as 'being' to one of 'becoming' preferring to use the term 'becoming' to denote a constant 'becoming' and state of change. This is a helpful way of viewing children and childhood, arguing that we need to consider 'being', as construed to

be a static or fixed state and a 'becoming' as in resisting the deterministic and purely biological, 'matured' nature of growth as a finite product or outcome in child development (Gessell and Ilg, 1949). As Lee (2001: 67) also asserts, the dichotomy of being and becoming prevents the 'multiplicity of becomings', and thus fails to account for essential inter-corporeal, multi-sensual flows of affect and emotion through human and non-human intra-actions. Re-thinking and reconceiving of the body as 'unbounded' and therefore always becoming, is a distinct departure from traditional conceptualisations of childhood as being fixed and considered through the trajectory of specific stages of completion. For Deleuze, the best example of 'becoming' (in addition to the orchid and wasp previously highlighted) is the classical true story of Moby Dick by Herman



Authors etude: Captain Ahab 'becoming-whale'

Melville (2014). Deleuze and Guattari (1987/2013: 284) describe the rather ambivalent relationships between Captain Ahab and Moby Dick as an 'alliance of love then of hate'. It is a curious tale of the hunter becoming the hunted. As Moby Dick is hunted by Captain Ahab, in retribution for the many whaling boats which have succumb to its defences (including Captain Ahab's very own encounter and subsequent loss of limb) he enters into a 'masterpiece of becoming' in all its totality. He descends into a state of aquatic virtuoso, navigating the sea like a white crusader, 'becoming-whale'.

As Deleuze and Guattari, (1987/2013: 284) describe aptly 'operating directly through a

monstrous alliance with the Unique, Leviathan, Moby-Dick'. This 'becoming-whale' is not an imitation, but a composition of 'something else' (lbid:319).

As Despret, (2004:131) states a 'with-ness' and Haraway, (2003:16) 'a becoming-with'. This becoming is always *double*, 'that which one becomes, becomes no less than the one that becomes-block is formed, essentially mobile, never in equilibrium', Deleuze and Guattari, (1987/2013: 355).

I attempt to animate this visually in comic panels as follows, using alignment with Barad's 'diffractive' process and von Uxekull's umwelten with Deleuze-Guttari's idea of 'doubling' thus embracing multiplicity...

Doubling and becoming-with-ness:













This 'becoming' brings into question the nature of self-identity and selfhood as a fluid, free-flowing ongoing process in the world, a symbiotic and embodied condition. Thus, it reflects a different kind of enquiry and discourse about entities, as reflected in the non-representational literature, (Thrift, 2007). This then denotes a different kind of enquiry and ethnography as well as discourse about entities. By considering maturation (growing) and transition in this way relational encounters can be explored and understood more expansively to reveal new configurations and patterns. As Ratelle, (2015:13) highlights this becoming is not an 'actual transformation from human to animal' but to 'enter the zone of proximity to the animal molecule'. This links well with Von Uxekull's notion of Umwelt and how different umwelts are therefore always intersecting one another. That is to say, we need an appreciation of multi-species umwelts (how we experience our environments and the affordances therein) in order to gain greater insight and knowledge beyond the human and Vitruvian (hu)man. This is in essence Deleuze's transcendental empiricism- experiences, forces, intensities (senses) beyond the self and subject. Our connections are 'desires' to expand and become-other (not to gain what we perceive to lack) but to transform. Life is therefore made up of events, contemplations and responses which create distinct human bodies and organisms, (Deleuze and Guattari, 1994).

Through contact and actual touch, we become 'inexorably altered' (Ratelle, 2015:13). This echoes with Haraway's, (2008) contact zone as a site of interchange. Not a singular transition but 'between two fixed states or identities' (Ratelle, 2015:13). In Deleuze and Guattari's (1987/2013) ontology, this is a perpetual becoming and becoming-with animals. Perhaps the example given by Deleuze and Guattari of Captain Ahab and Moby Dick, is indeed a perfect depiction of this 'becoming-with' and co-constitution of each other (through appreciation of each other's umwelts). In Ahab's quest for capture of the whale he enters an embodied immersion in the ways of whale behaviour, unconsciously, becoming-whale, as her enters the contact zone and zone of proximity.

Agential Realism and 'agentic cuts'

The idea of Barad's, (2007) 'agentic cuts' aptly expresses the means by which observation makes a 'cut' between what is included and excluded from what is being considered. Nothing is inherently separate from anything else i.e.; we are all entangled. Separations are said to be temporality enacted so as to examine (through these 'cuts') and observe long enough to gain knowledge about it (the social interactions of child-dog). I export these ideas in how Lenz Taguchi, (2010) refers to these as researcher and observer cuts, constructed

distinctions, thus as pieces of documentation (a photograph, a sketch, or written words) is....

'in motion (own emphasis) by means of its own agentic force and materiality' (Taguchi, 2010:64). These can be considered my researchers cuts and enactments of child-dog encounters and events as material configuration of touch, stroking and hugging. As intraactive engagements these trigger tactile and aural experiences with bodies active in sensing one another in each agential cut.

This is how new possibilities for intraaction with other matter and organisms will emerge. Thus, I **show** and animate how I utilise this idea through various creative methods (including that of my researcher sketches/ 'etudes'). These



Nexus points: through etudes marking the coming together of concepts and observations: Jenny, 'doubling' and 'coupling' with Ted.



Timmy, 'doubling' and 'coupling' with Ted

are foundations which I build upon from earlier connections made in Plateau #1 Prelude, Intermezzo, Part A.

Of significance is the question of objectivity in knowledge production and Barad states that "objectivity is a matter of accountability for what materialises...it matters which cuts are enacted: different cuts enact different materialized becoming's", (Barad, 2007:361). As such, my own entanglement (relational ontology) in the research process can be viewed as production and performance during conditions of mutually constitutive experience of embodied vitality and affect - the sense of being able to feel the other is both produced and enacted.

In Barad's (2007) neologism 'intra-action' is a challenge to individual metaphysics. For Barad, phenomena or objects do not precede their interaction, rather, 'objects' emerge (and are transformed) through particular intra-actions. Unlike apparatus which are said to produce phenomena, they are not assemblages of humans and non-humans (as in actor-network theory) but the condition of possibility of humans and non-humans, not merely as ideational concepts but in their *materiality*. The distinction of materiality is an important one. This is why Barad offers this study the employment of onto-epistemology (through agential realism), that is, a theory of knowing (epistemology) and an ontology (theory of being) and an ethics which are viewed as ininseparabile.

These 'cuts' afford the production of curiosity and creation of meaning, for both researcher and participants. As Lupton, (1998:32) posits...

'Indeed, language can frequently, sadly fail our needs when we try to articulate our feelings to another person.'

Examples of such 'cuts' can be seen in the work of Causey, (2017) and his ethnographic drawings of cultural events as cuts, Sellers, (2013) in her depiction of young children becoming-curriculum through photo elicitation of play, Taussig, (2011) through his ethnographic drawing as a way of 'knowing' and witnessing events and Berger, (1980) using drawing as a way of seeing in an inter-corporeal way, to name but a few. Noteworthy is the research of

Warfield, (2016) which has explored the social medium of 'selfies' as cuts which go beyond a representational paradigm to one that is emergent as entangled phenomenon. Here parallels with my researcher and participant cuts can be drawn.

Therefore bodily 'presence' or manifestation is crucially important and constitutes a constellation of bodily feelings. Post-structuralism's notion of the fragmented, rather than unified self is given privilege. Multiplicity is revered, rather than self-hood or self-identity. This rejects the idea that there is a 'true' or 'false' self that exists separately from social and cultural process (Lupton,1998). Nippert-Eng (1996) also highlights how photo's, drawings and paintings can evoke emotions which helps to render spaces (such as work or school for example) more comfortable and pleasant. This is referred to as creating a 'territory of the self' (Nippert-Eng 1996:58), marking out space, rendering it an individual's domain (the refrain, as in McCormack). Viewed also as re-enactments these rhythms and patterns of intra-activity can be described as a 'synergistic' relationship between the self and experience. Hence, researcher and participant 'cuts' are valid in the production of new knowledge (understanding specific phenomenon) which may also constitute a de-territoralisation of space, place and agency.

The topic of affect has been considered by several disciplines such as cultural studies, human geographies, developmental psychologists, and sociologists. What is apparent within the literature is a myriad of views' and terminology in attempts to define affect. Affect and emotion can be terms which are used interchangeably or synonymously, yet they constitute different things, Leys, (2011) uses the term 'visceral forces' and intensities which influence our thinking and judgements but are essentially separate from these. They are the precognitive, pre-subjective corporeal processes and states of the body. Leys asserts that the 'basic emotions paradigm' continues to dominate the research field and suggests a new paradigm which embraces a view of the body in its lived materiality, (Leys, 2011: 441) as this has been neglected by humanities

and social sciences leaving them in a perilous demise. She argues that as corporeal creatures we have the 'potential for ethical creativity and transformation that technologies of the self' (ibid:436). This moves away from the emphasis placed on language (for example in psychoanalysis) for which emotions are embodied intentional states, governed by our cognitions and desires. Not all embodied emotion becomes mere thought, it is a feeling with visceral and affective capacity, as seen in the etudes of Jenny and Timmy (Hayles, 2017; Griffero, 2010).

This landscape is further shaped by literature and discourses of emotional geography, which is ever increasing, (Pile, 2010). This favours relational ontology and ethnographic methods. It includes many perspectives such as feminism, phenomenology, Massumi's reading of Deleuze's reading of Spinoza and Deleuze's reading of Spinoza (depicting a rhizomatic process of connecting ideas similar to my own), psychoanalysis, Tarde's sociology notes his ideas of imitation, psychotherapy, and Darwinian thinking (see Bondi, 2005) – amongst others. As such it is shaped and characterised by a multi-disciplinary, and thus pluralistic paradigm (going beyond the Anthropocene towards a theory of animism) which lends itself well to creative enquiry. I will further expand on the relevance of animism in Plateau # 2 methodology/ensemble.

What remains critical when considering the apparent synthesis of psychoanalytic thinking with human geography is the distinction of the unconscious, a Freudian concept, being essentially *different* from 'the space in between' as defined in human geography and within this thesis (Bondi, 2005). As Pile, (2010) clearly points out, psychoanalytical thinking is at odds with the humanistic notions of affect and emotion, where these denote a subject that is stable, coherent and integrated, (in contrast, *fragmentation*; generating non-totalising fragmentary-wholes, is at the core of this thesis-assemblage). He further describes a permeable layer between the pre-cognitive, non-cognitive and cognitive, thus questioning affect emerging or being prevented from emerging into

cognitions and representation. This does not render affect as any less significant, if anything; it illuminates human experience on another level through nonverbal communication as the key point raised by Pile is one of in-articulation. By verbalisation of affect, it therefore becomes a feeling and emotion (labelled), thus integrated and coherent. Hence, non-representational (that is not codifying or representing affect) can privilege spatiality and intimacy. This is a key point as children's spaces and territory matter to their well-being, in terms of how this is shared, (Hackett, Proctor and Seymour, 2015).

Of note is the similar view that Tompkins (1962:63) holds of affect and cognition (leading to expressed, *verbalised* emotion) are invariably two separate systems. He alludes to 'a gap' between the real causes of affect and the individual's own interpretation of these causes. This is further supported by Lupton, (1998:36)

'Emotions thus at times may fall between the cognitive and embodied dimensions of experience, in a sort of 'space' for which there is no appropriate word (here again, language proves inadequate to the task of representing experience).'

This suggests that affects are only related to objects in the world, that our basic emotions operate blindly because they have no knowledge of them, or relationship to, the objects or situations that trigger them. As Michael Polanyi (1964:4) so succinctly puts it 'we know more than we can say'. Although something of an oxymoron, it is these very moment to moment encounters (which Massumi, (2002a) asserts happen in a split second) which this thesis seeks to illuminate, hence credence given to the significant nature and mechanism of this 'gap' which will be referred to as 'the space between' throughout this exposition and thesis. This is a similar trope to Deleuze's 'elliptical' (a place of emission). In qualifying affect and its fundamental position in human experience and potential well-being constituents, the writings of Deleuze and Guattari (1994) imply such possibilities:

"Becoming, (while happening in a gap), is nonetheless an extreme contiguity within (the) coupling of two sensations without resemblance, or, (it could be figured as) a light that captures both of the resemblances in a single reflection......It is a zone of indetermination, as if things, beasts, and persons endlessly reach the point that immediately precedes their natural differentiation. This is called an affect." (p. 173)

In drawing from the work of Massumi (2002) the dynamic processes of affectual experiences are further elicited in his idea of them being '*intensities*'. The complex juxtaposition between the environment and subject can be said to hold tactile, aesthetic, corporeal, atmospheric transmissions. These are akin to sound waves or energy forces from body movements such as the term 'jizz' used by Lorimer, (2007). Rodaway (1994: cited in Hayes-Conroy, 2010) exports these ideas, and, although considered abstract, they are nonetheless a demonstration of the attempts made to exemplify their importance to the human experience. This asserts that the body in space is materially productive, in essence through sensuous, haptic encounters; it has vitality, a visceral energy which can go unseen. Massumi, (2002a) captures the social relevance of this:

"the omission of sensation and movement in contemporary cultural theory has....undermined notions of body and change, trapping the body in a grip of pre-coded cultural meanings" (p.124).

Erin Manning has also taken up this through her writings on dance and the politics of touch. She extols similar ideas to Massumi through her exploration of movement and dance and how we become more-than-human in our capacity to affect and be affected, (Manning, 2013).

As humans perceive and make sense of the social and material world through body senses, the notion of 'embodiment' is important, (Merleau-Ponty, 1962). Merleau-Ponty argues that the body, through physical presence, our senses and perception, shapes our understanding of the world. Here we are reminded of the interrelated ways in which affect, emotion, bodily movement and cognition cannot be easily separated from each other, because fundamentally that are all

part of the same lived experience phenomenon. However, this thesis seeks to explore, observe and illuminate events which unfold during child-dog interactions and relationships. Although difficult and intangible, the noticing of affect could become a reality and ontology which requires diagramming and mapping in order to understand its true essence and significance. Exemplifying such is McCormack (2004) and his captivating visual milieu of 'drawing out lines of the event'. In this creative account he illuminates the transmission of affect by drawing out lines of movement practices which show the corporeal tracings of bodies in space. He infers a rhythm and 'sonorous assemblage' (p217) akin to Deluzian and Guattari's (1988) ideas and the transmission of affect and its visceral, rhythmic vibration through moving bodies:

"One ventures from home on the thread of a tune. Along sonorous, gestural, motor lines..." (p. 311)

Additional consideration has been offered by Brennan (2004) and Ash, (2013) around the transmission of affect. In particular Ash, (2013) discusses how affective capacity and affordance are very similar, naming this perturbation. Perturbation as a concept opens up our thinking about how space and time 'flow' and that they *emanate* some transcendental force. This helps to conceptualise affect as a kind of 'thinking' which is done by the body. It can be considered as being a state of 'unthought' as extrapolated by Hayles, (2017). In comparison to conscious thought affect is fast and has a different temporality to thought. It involves the brain but not consciousness. It is at a pre-linguistic level. Affect can therefore be described as 'matter in motion' which literally 'moves' the body, (Labanyi, 2010). Thus, affect is not a Pavlovian response to an external stimulus, it involves a kind of judgement enacted by the body and in the literature, this has opened up enquiry and discussion of affective methodologies and embodiment. Deleuze and Guattari's (1987/2013) concept of a (desiring) 'machinic assemblage' exemplifies this, that is, existing becomes conscious in a self-world continuum in which the terms "subject" and 'object' make no sense. His definition of 'desire' is one which means 'productive force' or 'instinctive force' which are positively arranged by social formations (or assemblages), and this is very different from the usual positioning of desire as a state of 'lacking'. This is an important differentiation he made from what Freud called 'drives' in his Anti-Oedipus evaluation, (Deleuze and Guattari, 1983/2000). Here the Cartesian mind-body split is what would appear to divide Deleuze and Freud. Freud's incomparable notion of the unconscious undoubtedly has a physiological (affective) and emotional component, but this is not clearly distinguished in his works. He psychologises aspects of physical affects through classification of states such as neuroses and paranoia, thus creating abnormal categorisations of ordinary, everyday emotion such as anxiety. Therefore, a need to be non-representational sensitizes me to affects, movement, rhythms and the temporality of experiences.

The material and literature on affect show the body to be an information system whose potentiality; Deleuze and Guattari's (1987) 'the virtual', is located in that half second before response becomes perceived as 'real'. This wordless expression is fundamentally relational and as Massumi, (2002a: 201) suggests:

"The difference(s) between minds and bodies, and other objects are perhaps not as essential as philosophers stuck on the subjective-objective divide made them out to be."

He uses the terms 'carnal melody' in an analysis of expressive culture as embodiment, communicable in pre-cognitive expression which he calls 'lifestyle contagion' (body movements expressed through song and dance). This 'musicality' of communication connects with Mannings, (2007) ideas of rhizomatic relational entanglements through body movements and touch. Her comprehensive and captivating posthumanism and poststructuralism stance permeates this thesis-assemblage as it aligns with the central tenants of the researches use of embodiment as a means with which to extrapolate and materialise affect (this will be further expanded upon in Plateau #2 Ensemble). She exports into her

reflections Stern's (2010) appraisal of vitality and the significance of this neglected topic when considering relationships and the affect-attunment nature of experience (Ash and Gallacher, 2015, cited in Perry and Medina, 2015).

The transmission of affect

Affects can be said to flow between bodies by transmission and by circulation, (Thrift, 2007). In using the metaphor of 'pipes and cables' an attempt to understand the transit of affects has been made by McCormack, (McCormack, 2006: 330). Affect travels unseen. It is the 'space between' bodies which could be said to possess invisible 'pipes and cables', I reconceive these 'pipes and cables' as rhizomes. In line with Trevarthern I envisage these cables, tendrils and branches as aspects of child-dog communications being dancing dots' greating lines and bars of music, which I expand upon later in this segment and forthcoming plateau's, (Trevarthern, 2011). These are similar to Ingold's notion of 'ghostly' lines, the virtual can become actualized in time, as he uses the example of constellations, shifting and moving, (Ingold, 2016a: 50). As Latour, (1993) also endeavours to assert and postulate a new vision, he alludes to discovering the 'lines beneath', hence the hybrids networks where the ebb and flow of the energetic world are closely spun together, creating what could be considered chaos and commotion, (Whatmore, 2002). These, chaos can be paradoxically linked to connection and order, as well as rhizomatic flow.

The relationality of affect means to be affected by and to affect others and as Brennan (2004) states, we are not self-contained in terms of our energies; affect is transmitted between bodies to create affective resonances (below the threshold of articulation). This could challenge discourses and Foucauldian (1978) theory around biopower (the control of individual bodies) and how humans are set apart as exceptional and rational with volitional agency. However, the power of affect is existent in both human and non-human form, as Massumi, (2002a: 160) asserts: "Newton did not see gravity." He felt its effects: a pain in the head". This means that a large part of experience goes unseen and if observation is evidence in methodology, affective and sensory approaches are fundamental to

engage with. This is an ethical issue I address in the research process in relation to Ted's body as non-human (Plateau #3).

These ideas signify the relevance of movements and embodied experience in cultural practices and the exploration of how affect contributes to everyday encounters. This thesis-assemblage seeks to explore these phenomena through the observation of everyday encounters and interactions children have with a classroom dog, in essence, their cultural discursive, practices and patterns.

At the core of this study is an argument for affect to be approached as a relational connective medium in research by locating it within cultural, human and animal geographies. As Bondi (2005) puts forward, *hybrid* positions offer reconciliation, even, synthesis with differing discourse and philosophy. In a similar vein, Leys, (2011:470) cautions of a position of *cognitivism* being viewed as creating a divide between human and non-human animals, purporting, that there is nothing about cognitive or intentionalist perspectives which should limit the capacity for cognition and intentionality to human animals. She emphasises that humans and non-human animals are emotionally embodied creatures, and that this fact is of the highest importance. However, this could be more rhetoric than reality in practice as affect brings in to question the idea of agency, and the agency given to non-human (animals) is still greatly contested, yet pivotal to the understanding of human and non-human relations as put forward by Latour, (2005).

The unthought

Navaro-Yashin, (2009) invites scholars to go beyond Descartes, which privileges the thinking and fully conscious human being as its main object of analysis. He strengthens the Spinozian argument that any philosophy which would consider cognition to be devoid of corporality was erroneous. Thought, according to Spinoza was to do with the passions, and called this *affectus*, referring to a sensation which may move through the subject, but not always be known to it (that which is unmediated by the cognitive, thinking and knowing and talking subject). In this sense, emotion can be considered as a felt process which is not always

labelled or translated into cognition, or as Barrett, (2007) terms, 'verbal intelligence'. In Spinoza's philosophy there is a lack of subjectivity. Thus, the momentary conceptualisation of core affect serves an important communicative function and observations of this phenomena (emerging from relational processes) can yield significant insights into the functional nature of affectual and emotional experiences between children and dogs. Along similar lines, Barret et al (2007) convincingly argues that the exact role of bodily feelings in the experience of affect and emotion is still open to scientific question, despite the benefits of neuroimaging. Perhaps the reliance on self-reports in labelling emotions has resulted in the lack of recognition of affect and emotion from a scientific perspective, as this is only achievable through the phenomenological approach in capturing the non-verbal experience.

Visceral Affects

External sensory information has strong reciprocal connections (Ghashghaei and Barbas, 2002), therefore, sensory integration and processing from the stimulus or object (dog to child, or child to dog) and associated visceromotor, vitalistic affects, provide an 'affective working memory' (Barrett et al, 2007: 383). This is important in appreciating the behavioural dimensions affect invokes. This memory gathering of affect states is inextricably linked to the 'intentional' capacities of both child and dog. Like children, dogs display communicative intention through intrinsic affectual patterns. The visceral and tactile dimensions of this affective and emotional encounter have been said to produce increased levels of oxytocin, 'the hug hormone' between humans and dogs, similar to that which an infant and mother experience in intimate contact with one another (Topal et al, 2009). Aesthetically and sensory appealing in nature, the dog constitutes a disposition in a relationship which can be described as having non-human charisma, (Lorimer, 2007). This means that the charisma of 'cuteness' (the possession of certain characteristics such as round eyes, soft body) in particular affords a tactile experience of our companion species (through touching, stroking, patting) and holds significant affective capacities and transformations in affective states (soothing, calming effects). Such affective capacities are enchanting and powerful, worthy of further inquiry. Cleary, a methodology that explores sensory events and experience is significant ontologically (Pink, 2009, 2011).

Wetherall, (2012) propounds a view that affect can be viewed as a philosophy of becoming and that it is *not* discourse. Massumi (1996) shares this idea and claims that discourse codifies affect. Affect is a lively, invisible, sensual realm, beyond the conventional, the cognitive, and discursive. In this logic affect is embodied intensity – instinctive and more immediate than any language-based actions or conversations. Thus, the contribution of this thesis is in establishing an affective enquiry which will potentially add to this body of knowledge. It is key in expanding the 'liveliness' of this field and the currency of vitalism.

Affective Atmospheres

The significance of the dimensions of affect have been discussed by Anderson, (2009). In his reflective account of affective atmospheres, he directs our attentions to the singular affective qualities that arise from but exceed the assembling of bodies. Atmospheres are always in process, emerging and transforming. The environment and landscape are an ever-changing dynamic force through the very idea of vitalism as is the human body so aptly described by Stern (1998); Stern (2010) as vitality affects. He describes the interpersonal world of the infant and its connection with inner and outer states which depict this dynamic, using the infant's hunger as an example of how affective atmospheres can manifest (the infant's eruption of hunger and signal to the facilitating environment/primary carer). These states are constantly being taken up and reworked in lived experiences – becoming part of feelings and emotions and these themselves become components within other atmospheres. This idea helps us to answer the notion of how the social relates to the affective and emotive magnitudes of life. What can be drawn out from this are affect as impersonal and objective, and emotion as personal and subjective. This appears something of a paradox as affect can be deeply felt and personal. Only when affect and emotion mix together (at the Deleuzian elliptical- 'the space between'- see conceptual model in appendix of the child as a vector of entanglements) do they discharge an ambiguous affective/emotive atmosphere, (Anderson, 2009). Steyfert, (2012) calls this the *affectif*. These further highlights that affect does not 'belong' to anybody but that it happens through the relationality between bodies, Steyfert, (2012). Hayden Lorimer perceptively illustrates this:

'Reindeer in the Cairngorm Mountains confounds any representational cartography. Instead, the landscape is encountered when the approach of a cold weather front charges the herd with a vital energy, disposing them to choreographed displays of shared mood, such as snow dances and 'sledging' down snow-covered slopes. Like vitalism....is marked by an interest in process: the world is not prefixed but is constantly in the process of becoming', (Lorimer, 2006: 502).

In summary, the literature from children's geographies elucidates how affect can be constructed in various ways and at first glance it seems a broad and complex notion to offer coherent conceptual underpinnings. However, through mapping some of its limitations and weaknesses as well as disagreements and agreements across disciplines, its significance in regard to relational processes is unequivocal: it cannot be known, grasped or made intelligible but it can be observed and ultimately made real. In order to accomplish this Pile (2010) advocates, a human, hybrid geography needs to:

- 1. Map relational ontologies, privileging fluidity and movement
- 2. Appreciate the interweaving of affect and emotion, valuation of proximity, intimacy and closeness
- 3. Acknowledge their shared methodological predispositions (anthropology, ethnography, autoethnography, and non-representational approaches)
- 4. Accept their shared understanding of the body (as composed of energies and intensities

There is, therefore, a great deal to be gained in observing the emergence of trans individual lines of force that augment or diminish corporeal and affective encounters, Anderson, (2006). By being and becoming hopeful:

'Bodies and minds, as infinite individuals, struggle, of their very nature, to persist in being. Our bodies are not just passively moved by external forces. They have their own momentum – their own characteristic force for existing. But this is not something that individuals exert of their own power alone. For an individual to preserve itself in existence, as we have seen, is precisely for it to act and be acted upon in a multitude of ways. The more complex an individual body, the more ways in which it can affect and be affected by other things,' (Gatens and Lloyd, 1999: 27)

In summary, children's bodies and how they connect with other bodies, both human and non-human, matter. Such relational connections are multiple. The exploration therefore of the 'materiality' of these is fundamental in understanding the relevance of affective entanglements beyond the human. A good starting point are children's relations to objects, toys and animals.

Sensory pedagogy and children's material culture: how 'objects' and 'things' are important to children

Children's material worlds are awash with toys, 'things' and sensory pedagogy. This intriguing realm hosts a menagerie of objects and is like an Aladdin's cave, waiting to be discovered, experienced and encountered. As toys and their materiality in children's play offers insight into how they engage with nonhuman entities, then the significance of exploring the topic is a useful one. Yet to what extent this material world is created by children can be questionable, as adults permeate its location, providing 'mini' versions of everyday items like chairs, ovens, cookers, irons, work tools, cars, trucks, figures, dolls, small animals and such like, as the conceptualisation of childhood is often an adult domain. James, Jenks and Prout, (2001) attest to the many competing versions and narratives of childhood. The renowned statement by Aries, (1962: 125) that 'in medieval society, the idea of childhood did not exist' still challenges the paradox that exists between protection of children, the exploitation of children as 'mini 'workers, and the need for them to have freedom. Yet beyond this question lies a greater issue, that of the under-representation of study into children's material cultures and the centrality of materials and materiality in the

make-up of social relations, (Brookshaw, 2009; Woodward, 2016). As Woodyer, (2008), discovered in her research into children's use of toys, the child's body, as embodied, corporeal experiences became the researcher's 'tool'. This reflects how the material properties of things hold a position of supremacy in our attempts to understand the sensual, tactile, material social lives and lived experience.

Accordingly, toys encourage specific methods of play and social interaction. Objects can invite and initiate certain actions, (Keane, 2005). Yet surprisingly this area of curiosity has not been fully explored in helping our understanding of children and childhoods. However, the intimate connection between children and playthings has been considered in Sweden in an analysis of the popular material from McDonald's Happy Meal, (Brembeck, 2008). Brembeck shows how a Happy Meal affords a range of activities, and these affordances are of key importance, (Gibson, 1977). She suggests they offer an array of possibilities and extend the child in 'unpredictable ways', (Brembeck, 2008: 270). In this rich example there is also a sense of agency for objects/toys as they bring about affects and effects, within the framework and flavour of Latourian actor-network theory, (Latour, 2005). This framework initially considered as being useful in (in)forming this thesis-assemblage has been supplanted in favour of Barad's exemplification of intra-action which more accurately depicts the nature of the inquiry through its unfolding social phenomenon (and will be discussed further in the next plateau #2 Ensemble). Borne out of her research, Brembeck (2008) claims that the boundary between child and object/toy becomes blurred and therefore, cannot be neatly separated. This apparent intense interaction could shape and transform thinking around childhood. By considering this aspect of inter/intra-action between children and inanimate and animate objects/subjects, methodology can be sensitised to encompass a focus on social embodied process in childhood. As Hohti and Osgood (2020: 10) highlight, children describe pets as "having something inside" the liveliness and animacy of pets and toys matters in children's lives in terms of materiality and affectivity. It remains a tantalising area in which this thesis

hopes to explore further the meaning of matter, materiality and animacy in children's lives, using the idea of the material-semiotic and animate nature of toys/objects/things. Children's engagement with toys and technologies cannot be explained within a universal framework, perhaps as children are active and intentional agents involved in the construction and renovation of their own worlds, (Chin, 2001).

The entanglements of children, materials, things and environments is well acknowledged theoretically, and also epistemologically, (Woodward, 2016). Yet how effectively social science methods are for exploring these issues highlights the need for exploration of *banal* everyday encounters (Kraftl and Horton, 2006) through this thesis-assemblage and by answering the questions of how children are indeed *vectors of entanglements*, (bodies of multiple becoming's through both human and non-human events), (Carlyle 2017) able to create their own theories, having vitality and capacity to do so.

In a provocative account Allison offers a cultural 'take' on toys (Allison, 2006). The consumption and globalization of toys is described through the Japanese culture industry around the design, production and marketing of playthings. Allison puts forward the idea of toys feeding a child's imagination in ways that are shaped by the global and capitalistic engine of toy markets, calling this 'the global imagination' (Allison, 2006: 4-5). An essential flaw in Allison's view of a global flux is in the lack of acknowledgement given to cultural differences. As childhood can be experienced positively without commercially produced toys, the claims made by Allison of 'healing' and 'soothing' toys is redundant, (Sutton-Smith, 1986). Take, for example the Finnish or Nordic perspective, when 'healing' and 'soothing' is needed children are taken into the woods and nature is viewed as the remedial, (Gullov, 2003). In addition, Allison gives no credence to children's perspectives, a further fundamental fault. This provocation by Allison serves to offer a debate around the politics of children's material cultures and how there are indeed implications of bio power and biopolitics (as

previously highlighted) being played out between children and adults when is come to toys and pets.

Ruckenstein, (2010) attempts to redress this imbalance, through an exploration of playthings to illuminate and craft the perspective of children. By using the example of the *Tamagotchi* toy, a virtual pet, the importance of materiality can be seen in how the children nurture the virtual pet and adds to their ability to move and become mobile in the world, creating ties and entanglements within it. This constant movement between two spaces is referred to as 'actual' and 'virtual, (ibid: 502). The author draws parallels here with the Deleuzian idea of the 'virtual' and 'actual' loops of the child. In doing so this spatial awareness indicates a division between material and ideal, to argue that the possibility for such movement is why children may be drawn to their virtual pets, or indeed toys of all kinds. Thus, this space can offer an avenue to enact and become part of the movement that children see as vital to being included in their everyday communities. Along similar lines Pokémon toys have been considered toys which 'animates many of them (children), and which has remarkable ubiguity, currency, urgency and vitality' (Horton, 2012: 5). Furthermore, Horton, (2012: 5) suggests the value of materialising affect lies in:

'...tracing a gathering and acknowledgement of everydayness, spatialities, material cultures, bodily practices and affectivity of children and young people's social and cultural lives'.

An example of this is provided in research on preschool nursery spaces, where one can preview the presence of a particular cultural phenomenon and mobility practices, (Gallacher, 2005; Horton et al, 2014). As previously mentioned, the child's world can become framed in an adult perspective with their experiences defined not only by their age but their power relations with adults. Material culture (toys) can also be viewed in a similar manner as postulated by Sofaer Derevenski (2000). That is, objects and toys used by children allow individuals within this peer group to be identified as part of it through the ownership and

use of them, (Brookshaw, 2009: 368). Horton, (2012: 6) also attests to this and goes as far as saying that toys such as Pokémon are a resource for 'agentic identity formation'. This rich world of material culture can be viewed intangible (as well as complex) and therefore a sparsely populated field of work. Yet the relationship between children and objects is a serious, yet surprisingly neglected area of study, (Brookshaw, 2009). Toys/objects can rouse and activate multifaceted social relations between children and adults. These collective engagements capture not only complexity but spatial manifestations which constitute various form of cultural phenomenon such as power struggles and boundary lines, (Corsaro, 2009; Jones, 2012; Nordtomme, 2012). This is particularly emergent within this rhizome research as seen through researcher 'etudes' and participant diagrams and maps depicted throughout in what can be called 'creative mutations', (Lorraine, 2005: 144).

The recognition that such toys/objects can support learning and offer 'magical solace' (Jones, 2012) can unsettle and affect space and social order in schools. The capacity of toys/objects can stir up a variety of pedagogic, emotional and social issues, (ibid: 54) and acknowledging their agency and capacity as possible 'agitators' in the Early Years Foundations Stage (EYFS) guidance, (Department for Education and Skills, 2007: 1), where the emphasis is on 'agreed values and codes of behaviour for groups of people' is destabilising. Yet denying of children's active role in creating their own cultures could be compounded by the maintenance of social order, particularly in terms of spatial organization in schools, (Buckingham, 2000). Undeniably stuff, toys/objects do matter to children. They matter a great deal, however boring or banal, elusive or obtuse to adults, they capitulate the locus for creative agency and children's own integrity, (Horton, 2010). They are affective, vitalistic, non-representational aspects of cultural practices, (Anderson, 2002, 2004). However, a note of caution exists for these kinds of affectivities, as they are typically neglected in children's popular culture due to inadequate representation of emotional tenor, (Gallacher, 2006; Harker, 2005). Therefore, this thesis-assemblage will constitute a contribution which further elucidates how children's embodied

emotion, agency and spatiality are interconnected and thus important to child-hood experiences. Furthermore, the 'aesthetics' of experience is a burgeoning field which has the propensity to widen views of materiality in childhood away from an adult-only lens, (Light, 2005). This resonates with the idea that aesthetic-affective relating describes a world (where human language is unable to fully capture a perceived and felt relation) as a realm in which individuals engage in 'autotelic activity' making them 'feel alive', (Rautio, 2013). In considering the power of material reality to generate new thinking in research, by viewing an object as a subject generates the idea of Deleuzian 'difference in between', rather than a just 'space in between'. Thus, there is a position of heterogeneity between bodies and a 'doubling' and 'coupling' that is mutually beneficial. Deleuze attends to difference as being generative of both object/subject – dogs and us- what do we take from it, how are we generated by it (the experience and encounter)?

Collective engagements offer different atmospheres and sociality, (Griffero, 2019). Our embodiment is always inevitably interrelational or intracorporeal. Our world is experienced through fleshy bodies, through our sensations and emotions and in how our bodies relate to other bodies and to material object and spaces, (Merleau-Ponty, 1968). Embodiment, then, is a relational assemblage, and one in which bodies can interact intimately with each other, (Lupton, 2013). In the language of actor-network-theory, an assemblage is made when child-object-toy come together, the object is an actant (through the process of intra-action with) playing a role in generating various feelings. In taking the teddy bear as an example, feelings of comfort and security are provided. They might assist through the touching, patting, smelling and stroking which the teddy bear 'actant' affords the child. Teddy bears can be described as intimate companions, soft items which children become particularly attached to. However, this attachment is influenced by 'community discourse' and cultural transmission, poignant entanglements conjured through intense communication that goes on around soft toys, in this instance, (Ruckstein, 2010). Indeed, they



Author's etude of own teddy bear entanglements and embodied memories- originally my mother's.

may become powerful symbols for adults of their early childhood experiences, representing a merging of a natural object (teddy bear) with childhood innocence, (Caldas-Coulthard, 2003). As Miller contends, these soft objects/teddy bears could be seen as more natural materials and textures, interwoven fabrics, less commodified and less contaminating, closer to nature, responding

to specific functional needs of children, (Miller, 2008). There is a body of psychological literature that examines the use of teddy bears as 'transitional objects' and comfort objects suggesting them as a 'bridge' between an intimate 'other' to ensure emotional connection when interpersonal relations require separation. However, as aforementioned, some researchers have argued that toys/objects are not transitional objects, but material-semiotic experiences and it is these encounters which need to be explored more fully to appreciate the affective and relational insights that the dimensions of toys/objects comprise. These relational phenomena shape relational assemblages, (Lupton, 2013). Hence, the need to shift thinking of the child-dog assemblage to that of "dancing dots", affective bodily forces and intensities co-constituting one another. This provides a lens in which to view relational affects, both actual and virtual, through attention to rhythms and spaces, beyond current psychological explanations.

In recognition of the audio-visual nature and appeal of the television, cartoons could be said to have a unique place in the material culture of children. Many cartoon characters, particularly those animated by Walt Disney, (Mickey/Minnie Mouse, Donald Duck, Goofy, Pluto), have been anthropomorphised. Tales of animal heroics have also permeated the screen and canine characters such as

'Lassie', 'Scooby Doo', 'Beethoven', and 'Marley' popularised dogs as companions and expounded the debate about whether it is love or self-serving survival instincts that cause a dog to have such loyalty and devotion towards humans, Etter, (2005):

Did Lassie really love Timmy? Or was she only saving him from disaster, time and again, so that he would reward her later with a tasty morsel from the dinner table? Scientists, veterinarians and dog owners have long questioned the relationship between man and his best friend. Even philosophers have ventured opinions on the idea: Plato described dogs as "lovers of learning" and Voltaire refuted Descartes' theory that dogs were merely unintelligent machines.

The Cultural Significance of Dogs and the Nature of Dog's Embodiments: (Hu)man's Best Friend?

Dogs are incredibly resilient and adaptable creatures, both as companions and as workers. History charts their progression from hunting, guarding, protecting and assisting in human societies. As a companion species they are the only animal which has grown common in urban societies in the second half of the twentieth century, (Green, 2006). Green, (2006) highlights the unique position dogs have in Western culture, 'being both visible and at the same time curiously opaque' (ibid: 103). People's relations with dogs, elucidates both dogs and culture interweaving together in complex entanglements which have emerged in everyday life. These entanglements are termed 'contact zones' by Haraway, (2008:4). She refers to as this a *figuration*, also described by St. Pierre, (1997) as a way of thinking outside language, and Baradotti's figuration (2000: 170) as a 'conceptually charged use of the imagination' -connecting explicitly with Deleuzian 'figurations' and Haraway (2008):

"Figures collect the people through their invitation to inhabit the corporeal story told in their lineaments. Figures are not representations or didactic illustrations, but rather *material-semiotic nodes or knots* (own emphasis) in which diverse bodies and meanings coshape one another (Haraway, 2008:4)

This conjures an idea of something within the human-dog relationship which can be elusive or go beyond linguistic and theoretical understanding. It also resonates with the picturing/imaginary of the rhizome and its hodes and knots. This relationship seems to have been something of a co-evolution one in which humans existed with animals in pre-industrial societies bound by a necessity, (Berger, 1980:13). Yet, Berger contests this relationship has shifted to something based more around companionship, even commodification, where a dog's (as well as a human's) sense of autonomy has been eroded:

The pet offers its owner a mirror to a part that is otherwise never reflected. But since in this relationship the autonomy of both parties has been lost (the owner has become the-special-man-he-is-only-to-his-pet, and the animal has become dependent on its owner for every physical need), the parallelism of their separate lives has been destroyed (ibid: 13).

A further view is that pet-companions are ideally suited to performing specific functions, (Soper, 1995). Haraway, (2003:33) challenges this interpretation of pet keeping in her *Companion Species Manifesto*. She denotes our co-evolution with dogs and writes:

"If the idea that man makes himself by realizing his intentions in his tools, such as domestic animals (dogs) and computers (cyborgs), is evidence of a neurosis that I call humanist technophilliac narcissism, then the superficially opposed idea that dogs restore human beings' souls by their unconditional love might be the neurosis of caninophiliac narcissism. Because I find the love of and between historically situated dogs and humans precious, dissenting from the discourse of unconditional love matters".

In suggesting that 'unconditional love' is precarious (similar to Soper's stance), Haraway presents an interesting perspective in viewing the complex nature of how humans and dogs interconnect in modern North America. She contends a *space* for the autonomy of dogs and reflecting on the mode of people's en-

gagement with dogs, which could provide a useful model for re-imagining people's place in the complex ecology of the twenty-first century, (Green, 2006). It is through the notion of 'human exceptionalism' that a starting point might exist to untangle the complex culture between dog and humans, as the influence of Haraway in communicating how the notion of kin cut across species boundaries in multiple forms, has failed to permeate environmental history to any great extent, (Pearson, 2015). As Massey (2005) and Pink, (2011) also respectively assert, our sense of home, or place - emplacement with others- is a key consideration and one which warrants further illumination within the field of child-dog and human-animal studies. Indeed, Pink (2011) reconsiders the notion of embodiment as one of emplacement and this can significantly support our thinking when it comes to child-dog interactions within the classroom. It integrates both the body with the environment, therefore accounting for how we are entangled in all our relations and connections, in *motion and performance*.





Nexus point- in clinical practice I am reminded of children's sensory connections to non-human entities such as blankets, pieces of cloth of multiple textures and smells. I recall a young child, aged 3 whose mother washed their 'blankie' and in doing so altered the blanket's odour and appeal, much to the distress of the child. Hence, these sensory entanglements are indeed significant in embodied ways of knowing and memory

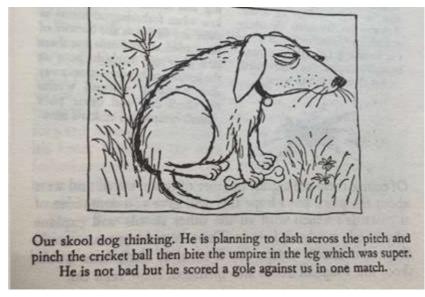
Children's literature and dogs (texts and peer culture)

In returning to the idea of 'contact zones' a further aspect of the cultural significance of dogs can be extrapolated. Anthropologist, Mary Pratt, draws particular attention to 'contact zones' (the term also used by Haraway, 2008) and traces eighteenth century European Imperialism as a key time of the humandog transculturation (a phenomenon of the contact zone). She argues that the forces of colonisation created the modern world, through a merging and converging of social spaces in which disparate cultures meet, clash, and grapple with each other, 'often in highly asymmetrical relations of domination and subordination', (Pratt, 2008: 7). If we consider the mutual benefits of this transculturation to both dogs and humans, we can begin to reflect of the adaptability of both as a species and on the potential beginning of anthropomorphism as a parallel process; this idea could have provided a perfect conduit for the domestication of dogs. Despret, (2004) introduces a notion of defining domestication in a positive construct of animals and humans as historically situated in interrelationships. She considers how both animals and humans have become attuned and available to each other. She asserts that this domestication explores new identities, and each partner learns to be affected (author emphasis) by the other; they become 'available to events' and engage in a relationship together.

This does not espouse the Western ethnocentric, humanist personhood, for either animals or humans, but is more to do with the development of serious relationships among significant others. This is what Haraway (2003: 208) refers to dogs as 'companion species', and 'mess mates' (sharing food together). Indeed, her adoption of the term 'companion species denotes her distain for being labelled 'post-humanist' and the similar yet different field of 'transhumanism', which may at first thought be curious and contradictory. But what Haraway seeks in doing so, is to emphasise the need for humans to understand self and other, intimacy, reason, agency, essence, embodiment, identity, and the body, without creating social structures of human exceptionalism and biological supremacy.

Children's literature is a useful place at which to assimilate these culturally significant reflections. If we map and trail the 'appearance' of school dogs within

children's literature, we can appreciate the material culture that was subtly permeating children's peer culture, mingling together as 'companion classmates' in the UK from the 1900's and onwards. The popular tales of 'Molesworth' are testament to this curiosity, with 'skool dog', 'Wandsworth' making an appearance in 1958.

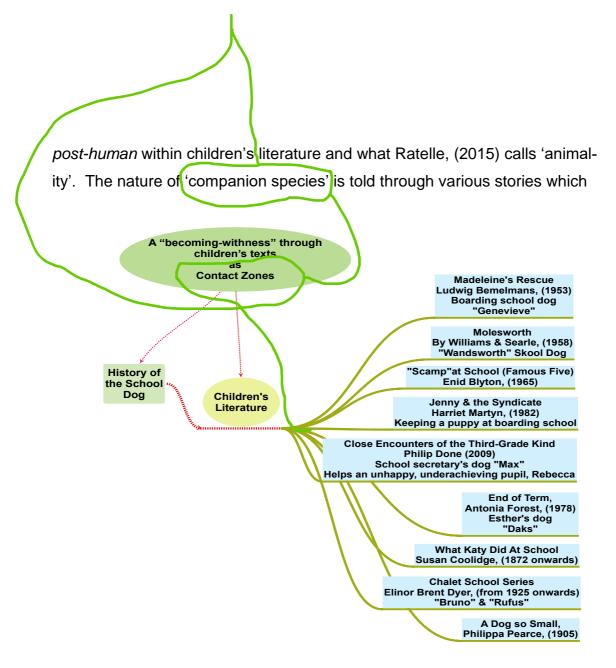


School Dog "wANDSWORTH" FROM 'THE COMPLETE MOLESWORTH' TALES. SOURCE: WILLIAMS AND SERALE, (1985), PP 11.

Image re-produced under the 'Fair use' of the Copyright, Designs and Patents Act, 1988

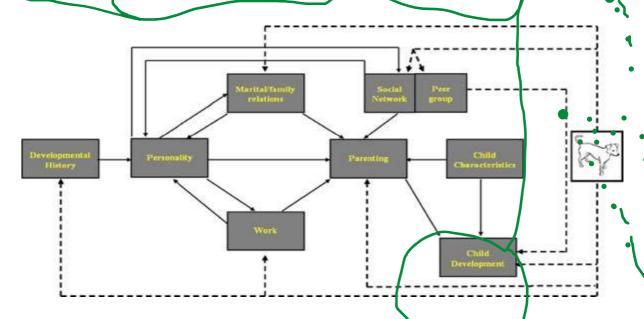
The delightful book 'Madeline's Rescue' is also an interesting portrayal of how children sought solace in this unique canine companionship whilst away from home/family at boarding school. It tells the story of how the children rescued a puppy and kept it hidden form the Headmistress. Eventually their secret is discovered, and the puppy is not removed from the school but integrated into the children's classroom and lessons.

The following **rhizo-map** is a visual illustration (through creation of a snapshot of children and dogs within children's literature) to link with the overall notion of human and non-human (contact zones.) This highlights the intersection of the



entail children coming together with dogs in school and educational settings. Through exploring children's texts, the framework of Western culture more generally, denotes a novel and collective entanglement through peer culture and cross-species contact zones- shared spaces of mutual affection. This is a helpful backdrop in mapping, not tracing, the possible origins of this social phenomenon in relation to children's material and peer cultures. Furthermore, the writings of Ahmed, (2020) highlight the interesting influence of comics and how examples such as Tintin and Snowy, Dennis the Menace and Gnasher and Snoopy and Charlie Brown also became permeated in social culture. In addition, the portrayal of animal-child tandems can perhaps serve as a useful example of not only 'material' culture but also how the reading of comics can contribute to interrogating animalhood and childhood, as they overlap and diverge.

Anna Tsing also provokes thinking, rather beautifully, around the idea of domestication where humans are part of 'cultures which are continually co-produced' and entwined together with other organisms, such as plants, microbes and animals in what she calls 'friction', (Tsing, 2005: 4). This highlights the complex and tangled web of interspecies dependence and interdependence, aptly termed 'unruly edges', in her attempt to collapse the nature-culture divide through her foray through the world of mushrooms and entanglements (Tsing, 2012: 141; Tsing, 2015). As Kohn (cited by Haraway, 2008: 218) also asserts, dogs are central actors in ecological and semiotic entanglements in species assemblages. The following diagram depicts our linear co-existence with canines. It outlines a process model of the wider determinants of child development and the cultural influence of companion animals, (Belsky, 1984).



Source: Endenburg, N. and van Lith, H. A. (2011) available at: https://reader.elsevier.com/reader/sd/pii/S1090023310004077?token=DB666018E

Perhaps the provocative account by Derrida, (2008) accentuates this point well. In recollecting an encounter with his cat whilst naked in his bathroom, Derrida alerts us to his state of 'animality', and in a Deleuzian 'becoming-animal' moment, he opens our thinking to the vicissitudes of the companion species and our habitation with them. When species meet something does *affect* each subject and as Derrida was clearly affected by shame in this 'visual

entanglement' (Haraway, 2008: 22) and mutually responsive, embodied, polite dance together, it illustrates how we need to give consideration and serious thought to companion species, far beyond the Cartesian notion of 'animal-machine'. As Green, (2006) points out, what is most fascinating about dogs is the way in which 'they do not accept what consumer culture takes for granted, the alienation of the body' (ibid: 118). This thesis seeks to explore this and how dogs remind us to have a different relation to our bodies. This allows us to enter a shared space of sociality in which the gaze of both dog and human provide a quality and intensity of intimacy and 'affect attunement' (Ash and Gallacher, 2015 in Perry and Medina, 2015, Stern, 2010:41).

There is growing scholarly attention being paid to the non-human agency of animals as an under-researched and theorised area (Haraway, 2008; Despret, 2004). Although Miklosi, (2015) considered the field of canine research had 'passed a phase of explosion' over the past ten years, Stahl (2016) rightly points out that we are entering a new phase, in our understanding of the human-dog relationship – a 'golden age'. It seems our quest to understand ourselves more is inextricably linked to our companion species and the vast entanglements we encounter and produce. As we share a closer relationship with dogs than any other animal it is inevitable that there are mutual benefits which are abound.

The Benefits of Human-Animal Interactions.

The literature on human-animal interactions is diverse and varied. The material diverges into specific categories and themes, covering a wide range of inter-disciplinary perspectives from developmental psychology, psychoanalysis, sociology, biology, cultural, human and children's geographies. Exchanges between children and dogs are culturally (western) central to the ongoing flow of contemporary social life. The material which explores the close relationship between humans and dogs falls into various themes such as attachment and bonding, social and physiological factors, specific settings and environments

where dogs are engaged to interact with children; collectively termed Animal Assisted Therapy (AAT) (for example, schools, hospitals, summer camps, counselling rooms), child developmental outcomes from being in the presence of a dog, and children's orientation to nature (as a conduit to their relationship with dogs).

As highlighted, dogs do indeed hold and occupy an interesting position within Western culture, and as research subjects. In Great Britain there are over six million households with dogs, (Pet Food Association, 2004). One of the areas of research to demonstrate this interesting alliance can be found in several research studies related to attachment theory. Attachment theory has been used as a theoretical framework to explain the relationship with humans and dogs, and whilst the literature review discusses the human-dog attachment system, it can be by no means viewed as the only theory, or indeed conceptualisation of this significant relationship. As children's mental health is gaining traction, unpacking this significant relationship is paramount to current discourse around emotional children's well-being, (Department of Health, 2017; Children's Commissioner, 2018).

Attachment theory and reconceiving relationships: The multiplicity of attachments ings

Dog-human dyads have been evaluated and assessed in great detail and with intriguing results. The use of Ainsworth's Strange Situation Procedure (SSP) (1969) has been a feature of several studies, (Rehn, McGowan and Keeling, 2013; Schoberl et al, 2016; Topal et al, 1998). These studies therefore adopted an ecological and experimental method to understand the human-dog relationship in terms of their attachment system and behaviours. This was based upon the premise that the human-dog relationship is equivalent to the parent-child dyad attachment due to what it describes as 'similarity in the form of mother-child interactions', (Topal et al, 1998: 220). In doing so a fundamental flaw is immediately apparent, as the human-dog relationship is thus

seen as 'anthropomorphism' and reduces this relationship to social constructs such as that of parent-dog dyad. There is a myriad of relationships humans engage in with dogs outside of this pretext. By observing the human-dog patterns of interacting and attachment we invariably see some similar nuances to that of parent-child as dogs have developed 'attachment' and 'bonds' to their human 'owners'.

In addition, the multiplicity of attachment relationships is acknowledged, but seldom explored in detail. This is often referred to as a 'hierarchy' of attachments; delineation and codification of experiences which can be misguided, and above all inaccurately interpreted. For example, the facial expression of the child could be argued to have been 'striated' by expert opinion of their behaviours (see Duchinsky, Greco and Solomon, (2015). This means that the parent-child relationship has become *facialised* by medical-psychological discourses (Burman, 2007). As such, this discourse can upset and disrupt ideas of attachment and render them harmful, (Cooper, 2010). What Judith Cooper alerts us to are the dangers of interpretation from false-positive affect through not seeing 'beyond the smile', giving the tragic case of Victoria Climbe as an example of how professionals considered she was happy and securely attached as she skipped up and down the hospital corridors. We now know that this presentation was far from the reality of her horrendous experience of sustained abuse. So, what can we learn and take from this?

Perhaps we require ontology which extend current ways of knowing. In their profound and excellent paper, Duchinsky, Greco and Solomon (2015) I became conversant in articulating my views on attachment and by sticking with the text, I made further important connections as a researcher to attachment theories political propositions. The readings of Judith Butler and Lauren Berlant were also de-mystified for me through this critique. I found myself in an alliance with their manuscript and with my own discord with using attachment theory as the ultimate and only formation of human development. This became the cata-

lyst for my thinking around methodology and research design in terms of seeking a non-representational, or concretized view of relationships (as in Bowlby's early attachment theory), and I have taken from it many strands. The first is the political formation of subjects and subjection, (Butler, 1997:45-46) and how the political 'disciplinary power' (Foucault) has become an 'affective glue' in a punitive culture through measurement of behaviours against normative standards around how individuals regulate and achieve them in the attachment and care-giving system. Butlerian ideas then indicate that attachment is flawed as it aligns with the production of obedient neo-liberal subjects. In an interesting appraisal about care-giving practices, Lupton, also offers the idea of how this might be further compounded by Apollonian views (purity and innocence of children) of caregiving 'work' and how it sees the infant body as in need of surveillance due to its 'inability to control and police its own boundaries', (Lupton, 2013:15) (I will later extrapolate Lupton's helpful triste of inter-corporeality and inter-embodiement in Plateau #3). Hence, the notion of the professionalisation of parenting practices through professions such as developmental psychology, health visiting, and social work (see the Gaze of the Psychologists in Rose 1989/1999: 135-154 for further reflection on 'governing' of the body). Furthermore, is the assertion by Berlant, (2011) that through this caregiving 'machine' the creation of *cruel optimism* is manifest. In unpacking such an oxymoron what Berlant points out rather starkly is how we might re-configure the infant body in its relationship with its carer as a site of 'affectability and change' (Duchinscky, Greco and Solomon 2015), orientating us to the 'texture of affect' in her social theory. Indeed, it alerts us to how the whole environment matters and how attachment is 'a social achievement' rather than 'solely a personal property of the individualised caregiver', (Duchinsky, Greco and Solomon, 2015: 239).

This renders the care-giver system, if lacking in resources, (i.e., economic, social, health and political) as insufficient in meeting the infant's entire needs for flourishing. Berlant, (2011:184) states:

'From this theoretical perspective on what love does to produce normativity, infantile dependency would not really be an experience of attaching to domination, but a scene where the subject negotiates an overdetermined set of promises and potentials for recognising and even thriving. It might be more like an environment where the subject is trained to cathect optimism'.

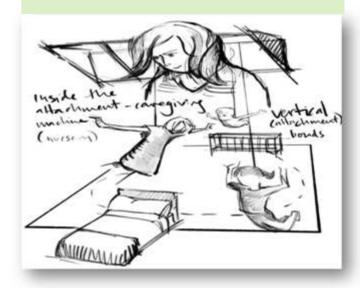
Berlant offers possibilities for re-configuring relationships as 'entanglements' through her critique of the limitations of attachment theory. What is helpful about Berlant is her acknowledgment of attachment theory and its flaws, whilst attempting to address it as a site and 'environment of touch or sound that you make so that there is something to which you turn and return' (Berlant, 2001:439). She also describes this site as a place in which children 'organise their optimism for living...(making) do with what's around that might respond adequately to their need' (Berlant, 2011:184).

The profound writing of Berlant, with its powerful thread of her own attachment experiences and narrative, are enthralling in itself, but this is not just a salutary

tale of less positive (or disappointing as she sates) beginnings, but one in which she describes how she was able to 'reconceive the behaviours of her caregivers' and by doing so, 'alter her own possibilities for attachment, leaving room for optimism amidst impersonal forces', (Duschinsky, Greco and Solomon 2015b:12).

This connects overwhelmingly to this thesis-assemblage and onto-epistemological positioning which foregrounds my Baradian stance of 'agential realism' aligning it with the ontological need

Etude to show multiple vertical and lateral attachments (cuts) for possibilities of entanglements and re-configurations of relationships. Image source: Carlyle, Robson and Lhussier, 2020. Reproduced by kind permission of Dr.lan Robson.



to explore the material-discursive and embodied elements of care-giving practices, to re-enact and re-configure new knowledge about the complex nature and ways of relating in both a human and non-human realm. This escape from sovereign and political schema helps re-configure Berlant's elusive idea of optimism which points to 'the being of the child', which exceed immediate ideas of dependency, then subjection (Butler, 1997). This is the very thing that Deleuze and Guattari mean in their exhortation of seeing the infant as a 'Body without Organ's' – recognising its intensities and forces for living 'optimistically' in the world, with needs of 'deterritoralistion' being crucial to flourishing. Additionally, Deleuze describes 'becoming-with' another as a transformative process, a coupling or doubling, allowing children to flourish (the notion of 'doubling' is later materialised in Plateau #4 Findings and Discussion/The Refrain, Rhapsody). Aligning with Berlant's idea of 'cruel optimism', such flourishing is mitigated by the carer (with which an infant desire attachment) being the very obstacle to our transformative 'becoming' as this is a state schema and sovereign power, through political and dominant discourse around attachment theory. Berlant is provocative in the sense of her radical ideas about what constitutes 'a good life' and forewarns us that the infant fantasy (thus perhaps despite an infant's positive attachment) will always entail disappointments and trauma. Indeed, Winnicott (1958) perceptively highlighted the infants need to tolerate frustration and disappointment in his perceptive seminal work 'The Capacity to be Alone.' Separation and individuation are indeed an area previously given much thought by Mahler, (1979) and was taken to help explain traits of autism, which have now been argued as irrelevant through Baron-Cohen's, (1997) ideas around a difference in autistic children's development of 'theory of mind'. This strikingly bears some similarities with Berlant's' proposition.

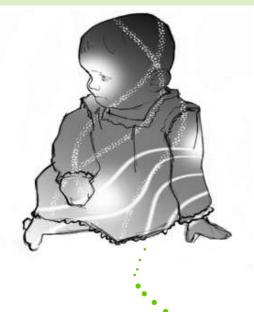
Berlant's zest for 'living with optimism' connects with such and is then a significant departure from current discourses, viewing attachment as disciplinary power, to one which encompasses a vitalist life force and energy towards existence. I have explored important idea creatively through the metaphor of Peter Pan and how he resists obstacles and regulation through his flights of fancy into Neverland, with the lost boys 'War Machine' (Carlyle, Robson and

Etude to show a desiring 'war machine' -Peter Pan's "Jolly Roger" Image source: (Carlyle, Robson and Lhussier, (2020), pp 12. Reproduced by kind permission of Dr. Ian Robson.



Lhuss ier 2020). Here Pan escapes subjection and opens up his potentialities for multiple relations and reconfiguring's. This then allows for consideration of

Etude: An infant with intensities and flows of 'affirmative impulses', Robson and Lhussier, (2020), pp 12. Reproduced by kind permission of Dr. lan Robson.



children not just as 'subjects' but as having multiple identities (or roles) with regard to their sense of selfhood and personhood. Such consideration entails a deeper respect and understanding of what it means for children to flourish, enabling their 'lines of fight' and 'optimism for living' to emerge. As Bergson states, becoming 'elan vital'. This suggests a way of being (affected) beyond and through the intersubjective field, highlighting the infant's sensorium and how it is able to feel affects and enter into reciprocity long before cognitive infrastructures are fully laid down, (Le

Breton, 2006/2020). This is what Berlant refers to as a 'vital conatus' (actualising tendency, and rhizomatic nature of being and becoming) and site of 'affirmative, impulse towards existence' in seeking recognition, acknowledgement and reciprocity' with the caregiver as a 'focal lens', (Berlant, 2011:184).

The functionality of interactions and behaviours, closely observed, can de-construct these linear concepts to open new ways of understanding 'being' and 'becoming'. Deleuze, in this sense, helps to dislocate childhood from psychological conceptual models and 'family' is replaced by 'community', (Deleuze and Guattari, 1988:228). Through this post-structuralist lens, we gain multiple ways of seeing relationships unfolding in the world. Importantly, we give credence to non-human relationship and hence the study of child-dog assemblages. We encompass the significance of siblings and 'others' (grand-parents, aunts, uncles, teachers, friendships, animals, material objects such as teddy bears, comfort blankets). It is here that Juliet Mitchell offers further credence to this idea in her intriguing depiction of vertical and lateral lines in relationships. In particular these lateral lines move back and forth and can be viewed in terms of how 'life is lived not at points but along lines' (Ingold, 2016a:119). This may resonate with the sometimes-insufficient capture of the family dynamic from genograms to denote all relations. Used in clinical practice as an assessment tool this 'flattening' of the family/and/or community can result in the neglecting of affect and emotion in the rhythm, tone and timbre, space and place of relationships. By engaging with the family narrative during creation of a 'family tree' and considering the embodied process it can afford, we can attempt to 'unflatten' our clinical practices, making them materially-discursive (Barad, 2007). In contrast to a genogram to help us 'see' interactive patterns Ingold, (2016a: 118) purports an alternative kinship diagram similar to 'phylogeny'- 'joining the dots'. Within this new way of diagramming, we can appreciate the 'life of lines' and the movement of self-renewal or becoming, making their way through the tangle of the world- our 'wayfaring', and movement within it, as it were, (Ingold, 2016a: 119).

I have written about such ideas being useful when working therapeutically in my own creative attempt to see things from a different angle or perspective, encompassing more of the inter-corporality of experience (Carlyle, 2017). By also thinking and connecting with ideas of children's geographies and 'psychogeography' (Rose, 2016) and the fundamental notion of therapeutically being alongside one another and 'walking together', I provide visually what Winnicott (1971:107) aptly describes as a 'potential space'. I expand such a notion to mean analytic space, cultural experience and an area of creativity (between therapist and child). As I reflected (Carlyle, 2017: 317) this is...

'not merely an abstract or esoteric concept but is applicable and transferrable to the moment-to-moment therapeutic encounter. As such, the importance of affect is key in understanding how feelings are poured into therapeutic space where the presence of empathy, for example, is received and felt between bodies'.

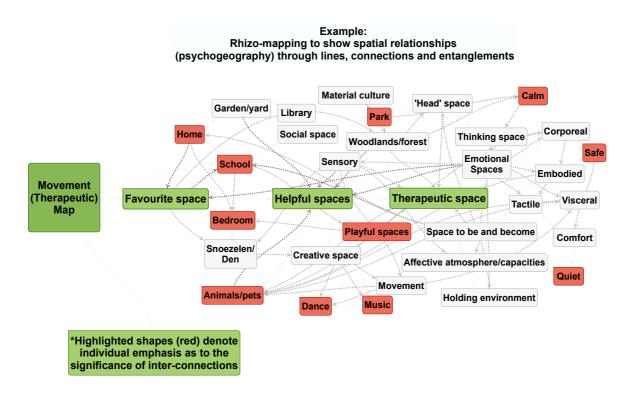


Image source: Carlyle, (2017) Promoting Pluralism in Counselling: an untapped Source of Relational Mapping as Therapeutic Process, *International Journal for the Advancement of Counselling, Volume 39, Issue 4, pp 314.*

This narrative interweaving of past and present experience can depict far more than the plotting of connections between individuals. As McCormack, (2004: 211) creatively demonstrates through his visual 'mapping out the event' we are able to display our movements in spaces and places as a way of understanding our relationships to one another over time- a kind of spatio-temporal mapping (Neppert-Eng, 2015). This assists us in our de-codification of experiences to open up new meanings and representations. Below I have attempted to show Mitchell's, (2007) ideas in a similar vein, as she purports the significance of sibling relationships which can be considered lateral, alongside others such as grand-parents, aunts, uncles, friends, and pets.

Therein lies a non-linear, rhizomatic thinking process with post-structuralism and the image of a tree in which Deleuzian concepts emerge and expand beyond current discourses— it is not just what is happening at the treetop that is important, but also at the unfolding, underground and *unseen surface;* the rhizomatic root system.

Whilst we know dogs have been changing epigenetically alongside humans some 16,000-32,000 years ago in East Asia and/or Europe and the Near East we must caution against inferring this genome morphology explains their human-like traits (despite the human gene being remarkably similar to that of dogs), (Stahl, 2016). Neither should we consider the dualistic Cartesian indictment of animal bodies as machines. Although child-like, dogs are species, companion species, not children. According to Stahl (2016) they have autonomy, agency and intention. It is no surprise they have become research subjects with the purpose of gaining greater understanding into human behaviour. Yet these studies have not progressed this understanding meaningfully and indeed conclude on a note of methodological discrepancy in the use of theories from human psychology being applied to dogs, (Rehn, 2013).

Although Schoberl, et al (2016) adapted the original Bowlby-Ainsworth-Main and Solomon attachment classification system for use with dogs and not toddlers, its finding replicated previous studies without elaborating sufficiently upon the precise nature of human-dog relationships.

Conspecifics aside, what seems apparent from further studies (which I will discuss later) is that attachment theory is only one explanation as to this intriguing relationship. As human-dog interactions can take place without any previous forming of an attachment, there are therefore other dimensions which are at play. Nonetheless, further studies have attempted to reinforce this theory (attachment) by employing more appropriate measures and methods to their study design. As well as assessing dog's attachments to humans, studies have sought to understand human attachment to dogs. However, it seems apparent this reductive, concretized approach to understanding child-dog relationships is limited and does not illuminate the sensory, kinetic and intricate nuances of such encounters. For example, Hall et al, (2016) utilised a scale developed by Johnson, Garrity and Stallones, (1992) known as the Lexington Attachment Scale to Pets (LAPS). This empirically derived scale was used to assess children's reported relationship with their pets. It has three subscales: General attachment, Animal Rights and Welfare, and People Substituting. This scale had also been implemented in a previous study which showed that children who scored higher on the LAPS scale also tended to display greater empathy, (Daly and Morton, 2006). Hall et al, (2016) recruited 99 children (50 male and 49 female) between the ages of 7-12 years. The study took place in a research laboratory. The children were given a 10-minute task to measure the amount of time the child and dog spent interacting while the child was sitting quietly in a room. The child was seated in the centre of a 1m radius semicircle marked with tape. The child was then asked to call the dog over once at the beginning of the session and once again halfway through. Unless the dog entered the semi-circle, they were asked to remain neutral. In addition to this task, further assessments were carried out by observing the child's pointing gesture to the dog, time spent petting the dog and gazing at one another.

The results of this study suggest that the strength of the child-dog attachment is associated with how supportive the dog is reported to be (following pointing gestures, petting and gazing). This builds upon the work of Fillatre et al, (1986) which reported that children are the initiators of interactions with pet dogs. One particular finding of the study by Hall et al, (2016) is worthy of note. They found that different to the Fillatre et al (1986) study, children with Higher General Attachment scores were associated with less petting during the sociability task. This indicates that something else may be driving this association and further observational studies could elicit how children are influenced by a dog's behaviour, and the degree to which they view them as similar to human social partners.

Attachment security in early developmental experiences with a primary caregiver is widely accepted as providing the 'internal working model' for all subsequent relationships (Weinfield et al, 2000; Stroufe et al 2010). However, although this early experience remains part of the ongoing developmental landscape of childhood, it is not deterministic. There is less research on attachment in middle childhood and given that this may be a predictor in the later development of relationships with pets, it warrants further investigation. This issue has also been touched upon by Kurdek, (2008) in a study of college student's attachment to their pet dogs. He suggests that as autonomy needs increase for young people and pet dogs, and that unlike parents and siblings, pets may not be perceived as critical, judgmental and restrictive, and may even offset or 'buffer' feelings of loneliness, depression and isolation that often accompany the individuation process (Archer, 1997). As individuation is a process within middle childhood, as well as infancy and early years, this remains an area of real curiosity in terms of significant 'other' relationships which might include dogs. Clearly a further gap in research studies exists in this specific area, advocating new methodological approaches to understand the complexities and nature of the dog-child dyad. As highlighted by Kurdek, (2008) there is no clear model of what might constitute an attachment figure and where pet

dogs fit into the mix. In using Self-Determination Theory: Autonomy, Competence and Relatedness, (Ryan and Deci, 2000; La Guardia et al, 2000), Kurdek has attempted to expand this idea and how dogs meet the need for relatedness, connection, belonging and being cared for (due to their high levels of responsiveness).

In the Kurdek study 923 college students were part of a survey conducted on a university campus, (Kurdek, 2008). There are similarities with Hall et al, (2016) in that, correlations between caregiving characteristics of dog owners equated to higher levels of global attachment. Participants were asked to complete a Likert scale reporting their attachment to human figures (mother, father, sibling, best friend, significant other) versus attachment to pet dogs. Interestingly, pet dogs were rated more favourably than fathers and siblings and it is probable that this could be correlated with the fact that dogs are less critical and are providers of unconditional affection and acceptance. Furthermore, the findings indicated that people strongly attached to their pet dogs do not turn to them to be substitutes for failed interactions with humans and that their strong bond with their dog is not generalised from positive experiences (attachments) in their relationships with other people. Thus, the human-dog relationship is distinct, with negative traits of dogs not inhibiting its development. Characteristics of the dog (which was linked to high levels of global attachment) were affection, energy and intelligence. Significantly, Kurdek highlights that affection did not contribute unique information to the global attachment measure and found this puzzling, (Kurdek, 2008). In light of this, affection as an affective process in itself deserves further study. This will be further discussed when reviewing the physiological and psychological literature.

In contrast to Kurdek's (2008) findings that human interactions with dogs are not generalised to humans, Weidi, et al, (2015) claim otherwise. In their small-scale study of 19 male children aged 7-11 years in Germany with insecure avoidant or disorganised attachment. In an experimental design, using the

Separation Anxiety Test (SAT) (Bowlby, 1976, Julius, 2009) and the Trier Social Stress Test for Children (TSST-C) (Krischbaum, et al, 1993), by invoking a controlled stressful situation in the boys they then observed their behaviours toward an unfamiliar dog which was present. They inferred that the boys who were classified as disorganised in their attachment behaviours made more physical contact (stroking, touching, holding) and talked more to the dog. The boys with avoidant attachment interacted less. There are several shortcomings of this study, namely the gender bias of only using boys, and not using larger numbers of children with different attachment representations.

The role of dogs/pets in family systems which explore relational dynamics such as bonding and attachments is a burgeoning field in family therapy and systemic practice, (Walsh, 2009). Walsh, (2009) draws attention to the fact that dogs are very much part of the family system and provide socio-emotional support which facilitates resilience in family members. By using a Bowen-orientated, (Murray Bowen, 1978) example by Cain, (1983) who adopted an exploratory questionnaire study with a convenience sample of 60 families, it was extrapolated that pets are attuned to the emotional climate and affective states of the family. Participants considered their pets to be sensitive to their moods, as shown in their tone of voice, body language or tears. Cain (1983, 1985) also found that, like a family member, a pet can be 'triangled' into relational tensions. Similarly, studies by Allen and Blascovich, (1996) found that pets can be emotional barometers and homeostatic regulators, moderating stress in relationships. Heiman, (1965) noted that in some instances pets act as psychological and relational equilibrium through processes of displacement, projection and identification. Clearly a dog/pets often privileged position in the family, culture and wider society is complex and multi-faceted, once more advocating a need for research which is 'biocentric' and connects with the essence of human relationships with other species and the natural world, (Meslon and Fine, 2006).

Qualitative studies by Cohen, (2002) and Maharaj and Hanley, (2015) respectively, also reaffirms the idea that dogs contribute to a sense of family and function as family members through the intimate bonds they share with human caregivers. They also agree that there is more to the relationship than anthropomorphism as they describe owner's communication with dogs 'transcending customary notions of language and intelligence, these non-verbal exchanges challenge human social and conceptual boundaries', (ibid: 2006: 1188). A group of 27 dog owners (22 female, 5 male) aged between 17 to 74 years volunteered to take part in a focus group discussion. This study purports comparable findings in how dogs appear to have multiple and overlapping roles that challenge traditional roles of family, (Knight and Edwards, 2008). The study is also in keeping with the dog's adaptability to different roles and Power's (2008) idea of the ways of relating between people and dogs as being 'more- thanhuman.' The concept of 'more-than-human' will be discussed in Plateau #3. Dogs provide opportunities for intimacy and nurturing and have been conceptualised as 'functional kin', (Cohen, 2002). They certainly do seem to occupy a different space to humans. It is this *space* which is an aspect of what this study seeks to explore.

EI-Alayli et al, (2006) also denote findings from a study and survey of 137 pet owners which showed correlations between people's attachments to their pets and pet and self enhancement bias, therefore being biased in the benefits and well-being their pets offered. This interesting study also suggested that pets were seen as extensions of themselves. Along comparable lines, the idea of pets as 'self-objects' has been described and studied elsewhere, (Adams, 1999; Brown, 2007). Brown, (2007) conducted 24 interviews by telephone and in person. This revealed that relationships with their dogs: 1) gives them increased self-esteem and self-cohesion, 2) keeps them calm and soothed, 3) makes them feel understood, valued and loved, 4) gives them the feeling of being deeply connected to another being, and 5) gives them a vibrancy for life. The notion of idealisation of their dogs was found, as well as the idea of twinship. Idealisation could be akin to 'pet enhancement bias' as discussed by El-

Alayli et al (2006). In addition, their own well-being was intimately tied to the dog's well-being. In particular, mirroring was seen as significant in the relationship and this was deemed to provide acceptance and affirmation of the goodness of the self. Given that 'mirroring' is also an important feature of the parent-infant dyad in the forming of the attachment system, clearly parallels can be drawn from human-dog dyads, thus falling into a pattern of relating which can be theorised by attachment theory. However, this does not explain the immediacy of the 'reciprocal dance' so evident in human-dog encounters, prior to any attachment system, pattern or relationship having been formed. Therefore, the relationship dynamic indicates something more than attachment theory can explain. As Topal et al (1997) highlights there is a bi-directional influence on the child-dog relationship – dogs are sensitive to children interacting with them and children are sensitive to how well dogs respond to them. The description of the relationship being a 'social unit' is rather apt and they hint at the limitations of using only attachment theory to explain this phenomenon. Therefore, the inclusion of new materialism and posthuman perspectives is needed to gain a more in depth understanding of the child-dog assemblage through sensory, kinetic and relational patterns. I reiterate the value of my proposing 'dancing dots' in order to visually manifest this as similarly described by Trevarthern, (1999).

A rather atypical qualitative study by Jegatheesan and Witz, (2014) has demonstrated the potential to consider the child-animal bond from a creative perspective, namely an *Essentialist Portraiture*. This 'portraiture' approach will be discussed in the next plateau as there are clearly a lack of empirical studies using this method as it became emergent from this journey in reviewing the literature. This single case study formed part of a wider cross-cultural study with young children on the human-animal bond. An interview was conducted with a 7-year-old girl regarding her pet cat 'Izzy'. This approach attempts to gain a more subjective insight into the child's experience and being by seeing the child-cat as a 'portrait', (Lawrence-Lightfoot and Davis, 1997). Here the 'nuance' of expression can be seen in the totality of the person's verbal and

physical expression. Whilst the overall aim involved a study of the consciousness of the child, it is clear by moving away from a behavioural methodology, greater insights can be obtained. What is poignant and noteworthy is the idea of the child interpreting the *movement* of her pet and the communication that is non-verbal between them. This renders the ethnographic, approach to research, in terms of being *emplaced*, (as adopted by this thesis) as extremely revelatory alongside the concept of *kinesthetic empathy* (knowing another's movements and having an inner state of mimicry and recognition of the affective tenor), (Shapiro, 1990).

In summary, in the main, self-object and self-determination theory, have been used to explain some of the uniqueness of human-animal interactions from an attachment theoretical framework. There is an undoubtable affective, tactile, and sensory engagement between human-dog dyads (through twirling, jumping, pointing, petting, licking, stroking) yet this aspect of the interaction has not been sufficiently explored in greater depth. From an ethnographic perspective, research could answer some of the questions attachment theoretical frameworks have thus far failed to do convincingly.

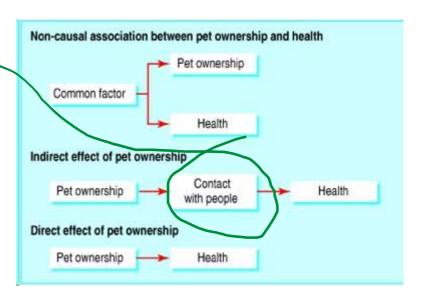
Being well together: Wellbeing benefits of dogs are psycho-social and psycho-physiological

The literature on health benefits from pets is convincing yet inconclusive. This needs to be considered, although seems rather out of kilter with the thesis-assemblage due to its predominately biological determinism and reductionism. It is apparent that these research designs are not sufficiently robust and have been considered to lack larger sample sizes with longitudinal issues also being implicated, as being required (Wells, 2009). Evaluation of these, therefore, strengthens this thesis in terms of its rhizomatic design and methodology as appropriate from both an ontological and epistemological perspective- thus making differing claims about how reality is understood and how knowledge is derived from that reality.

There are many physical benefits from pet ownership (specifically ownership of dogs) with prevention of serious illness such as stroke, myocardial infarction and cancer being cited, (McNicholas, 2005). In addition, pet owners visit their doctor significantly less than those who do not own a companion animal, (Heady, 1998; Siegel, 1990). This is thought to be liked with reduction in stress levels associated with the companionship pets afford their owners, being considered as 'social catalysts', alleviating feelings of loneliness, isolation, as well as promoting social conversation and friendship. The very nature of the dog-human relationship, such as shared pleasure in recreation, relaxation and uncensored spontaneity (author's emphasis) are all attributed to a good quality of life, (ibid, 2005:1253). Furthermore, in a study of the human-dog bond in rural and remote Australian indigenous communities, has offered an alternative perspective from a Western view and discovered dogs were culturally very important, (Constable et al 2010). Themes include the value of their protection to guard people at night from spirits and being very much part of the kin system and community.

McNicholas et al, (2005) proposed a model to show three potential mechanisms of the association between pet ownership and benefits to human health, however, these mechanisms are complex and highlight the need for further research. First of these potential mechanisms are that the non-causal association between animals and humans should be recognised. The common factors (personality traits, age, economic and health status) can impact the decision to own a pet and therefore produce an apparent link between pets and health. Secondly, the indirect effect, increased contact with people, is certainly, when

considered in light of pets being social catalysts finked with producing a form of social networks, community and social capital, (Putnam, 1995, Degeling et al 2016). Thirdly, the direct effect of pet ownership focuses on the *nature* of the relationship and the idea that companionship seems to buffer the potential threats of disease and ill health.



As previously discussed, rather than an attachment theoretical framework, it is useful to examine the 'supportive functions' of the human-animal relationship, (Collis and McNicholas, 1998). This will be discussed in the next section on Animal Assisted Therapy, (AAT).

The role of oxytocin has proven to be a major factor in the activation of these positive effects due to proven reductions in blood pressure and heart rate noted by several studies in children and adults, (Friedman et al, 1983; Grossberg and Alf, 1985; Kaminski et al, 2002; Allen, Shykoff and Izzo, 2000). Beetz, et al, (2012) in a comprehensive review of the literature pertaining to Human-Animal-Interactions (HAI) and possible benefits purport that the oxytocin system not only provides explanation of the benefits but suggest that as a theoretical approach it allows for an integrative view of the different findings of this large body of research. As with cortisol reduction (lower levels of stress hormone) found in children (with insecure attachment patterns) having physical contact with a dog, (Beetz et al 2011) physiological responses do need to be *integrated* in understanding of this complex phenomenon. This can clearly be very helpful and has attributed to HAI being taken seriously within public health and human developmental research. However, by adhering to a purely biologi-

cally determined perspective the very essence and the nature of the relation-ship between humans and animals has been fundamentally lost and reduced to 'chemical' interpretations, albeit with an undertone of the acceptance of human-animal sociality. What remains something of an unexplained phenomenon is that the very *presence* of a dog has proven to have positive affect and effect, but it is far from being fully understood. Several studies include this as a recurring theme, (Crossman et al, 2015, Gee, et al, 2012). The idea of a dog's mere *presence* having an effect on human well-being holds an untapped source of knowledge which current research methodologies have not hooked into. This point will be discussed further when the use of Animal Assisted Therapy (AAT) is appraised hereafter.

Research about the benefits of animals preventing allergies in children has gained interest. In one study, in a birth cohort of 397 children with early contact with a dog (in early infancy) have been said to suffer fewer allergies, respiratory symptoms, otitis media, and diseases due to the help they give to mature the immunological system, (Bergroth, 2012). Paediatric oncology patients have also been given a great deal of attention recently as dogs have been found to reduce distress, elevate mood and assist recovery in medical treatment settings (McCullough et al 2016).

Clearly there are many benefits to human-dog interactions. Although they should not be regarded as a 'cure-all' for human health, they may play an important role in helping to facilitate and shape future well-being, particularly, emotional well-being with further research having the potential to influence health care practice, education and policy.

Animal Assisted Therapy (AAT): Human-animal entanglements

Due to the positive benefits of human-animal interactions it is no surprise that there is a growing body of literature concerning the use of animals in providing AAT. In a meta-analysis by Nimer and Lundahl, (Nimer, 2007), four main areas were recognised as being associated with positive outcomes: autistic spectrum symptoms, medical difficulties, behavioural problems and emotional well-being. It is noteworthy that many of the research studies commonly reported on the use of dogs for AAT. Other animals such as horses, cats, rabbits, guinea pigs and aquatic creatures have been used in AAT. The use of dogs is thought to relate to their domesticity and accessibility; however, it should be borne in mind that they also have a more striking impact than other animals. This feature in itself is significant and denotes a uniqueness and differing quality about the nature of their relationship with humans/children. However, this has not fully been appreciated in the review by Nimer and Lunddahl, being mostly outcome based. Other sources were therefore critiqued to explore this in more depth. Correlations with a dog's mere 'presence' could be an important factor which seems to have been over-looked by many studies, although specific areas (such as school classrooms) do account for the benefits of a dog's 'presence' the quantifiable measures appear to have taken priority and overshadowed this. For the purposes of this literature review, children and dogs formed the main focus when considering AAT, although there are obvious benefits which cover life-span development and the use of AAT with the elderly and teenagers which have been cited and these are interesting and expanding fields. It is also worth mentioning one study, exploring the association between pet-ownership and health status in adults with myalgic encephalomyelitis (otherwise known as Chronic Fatigue), which supports the value of pets therapeutically and suggests they are under-utilized in promoting well-being, (Wells, 2009). As the authors search retrieved sources which correspond with the four main categories in the Nimer and Lundahl, (2007) meta-analysis, each will be taken in turn, to systematically review, and provide a synthesis of subsequent, additional material and resources of current research.

Dogs as companions, sensory objects and social facilitators in Autisim Spectrum Symptoms

Children with Autism Spectrum Disorder (ASD) have differences in sensory processing, social skills, communication and interaction with others. They also have sensory integration difficulties. Interventions based on the exploitation of the emotional aspects of child-dog relationships hold great potential for youngsters with ASD to relate, connect and interact with others, reducing core symptoms of the disorder, according to Berry, (2013). The critical review by Berry et al, (2013) found six studies of children aged from 3-12 years which showed improved communication behaviours as a direct result of their interactions with a dog, (Rederfer and Goodman, 1989; Martin and Farnum, 2002; Sams et al, 2006; Burrows et al, 2008; Viau et al, 2010; Silva et al, 2011). These studies were experimental in nature, included semi-structured interviews, case studies and observational data. Trained dogs were reported to elicit increased prosocial behaviours, verbal responses and possess 'a unique capacity to serve as an emotional bridge in specific therapeutic contexts and to act as social catalysts' (Berry et al, 2013: 77). One study which employed a therapy dog in sessions and conducted systematic de-sensitisation to promote verbal communication, with a youngster with Selective Mutism, found that communication increased and transferred outside of the therapy room within a single academic year, (Zents et al. 2016).

These studies have prompted Carlisle, (2015) to explore the theoretical idea of biophilia (which proposes that humans are drawn to and interested in nature) further, linking it with attachment theory. In a telephone survey of 70 parents of children with ASD she found that parents attribute the positive benefits of companion dogs increased their child's social skills. A strong association with children bonding and attaching to their dogs was indicated. This is a familiar theme which has emerged from many studies. However, it is poignant that these children have not been considered in terms of their sensory processing and sensory integration profiles as opposed to their 'attachment' narratives.

As interacting with dogs can be a very tactile and kinaesthetic process it is remarkable that these factors have rarely been explored in any depth within such a vast body of literature. As children with ASD have particular nuanced differences in their sensory processing aspects of their development, this is an untapped area which could yield new information and knowledge in the field.

Medical 'detectors' and the labour of dogs

Although 'medical difficulties' seems a rather vague, ambiguous term, it reflects the very nature of the difficulty in classification and categorisation of innumerable conditions which constitute the term 'developmental disability', or 'medical condition'. Indeed, ASD or PDD (Pervasive Developmental Disorder) could also 'fit' under this term. Therefore, for the purposes of this appraisal, this broad umbrella term will be used to describe studies which distinguish themselves from 'mental health difficulties' but capture medical issues. Dogs have been considered to aid humans with physical ailments such as hearing and visual impairment, epilepsy, diabetes and cancer. The idea of dogs being 'early warning systems' has been discussed and examined by Wells, (2009b). Hearing and visual impairment are perhaps the more obvious examples when one considers the ability of trained dogs to assist humans. Guide dogs for the blind have been long established by organisations such as Personal Assistance Dogs in the UK. Pemberton, (2019 in press) has recently contributed his appraisal of unseen archives of the specific training Guide Dogs undertook, providing a fascinating and unknown insight into human-canine relationships and visually impaired or blind individuals. He wonderfully highlights the current ontological framework of animals as labour, and how they become 'tools' for human utilisation and conservation, and how this framework requires a shift in order to encompass greater understanding and bring greater credibility to the field of human-animal studies. The specific behaviours of dogs in communicating to humans with hearing impairment is also gaining anecdotal interest.

The olfactory prowess of dogs is generating exciting research interest into the detection of cancer. Although the precise mechanisms of how this is feasible are not entirely understood and have not yet been explored scientifically, one of the leading medical journals, *The Lancet*, published a paper in 1989 detailing how a dog had persistently sniffed out a mole on its owner's leg which later turned out to be malignant, (Williams and Pembroke, 1989). There is substantial evidence that dogs can reliably predict the onset of seizure in their human owners. This has been considered inherent in some dogs and has been as a result of training in other dogs, (Brown and Strong, 2001; Dalziel et al; 2003; Kirton et al, 2004). Dogs not only use their sense of smell but also their ability to read visual signals (facial expressions) and bodily cues such as perspiration, respiratory changes, and muscle tensions, (Brown and Strong, 2001). Similarly, humans with diabetes have been assisted by dogs detecting odour cues, (Chen et al, 2000; Wells et al, 2008) and increases in perspiration, (McAulay, Deary and Frier, 2001).

There are currently no studies in any of these areas which involve children. Studies which support the use of dogs to help calm and relax children in certain clinical settings have been identified with Havener et al, (2001) noting positive impact in a dental surgery and Nagengast et al, (1997) when children were routinely examined by a doctor. Furthermore, in therapeutic terms, dogs are being utilised in paediatric oncology services as an adjunct to treatment, with children displaying less distress and anxiety in the presence of a dog, McCullough, (2016).

Dogs as therapeutic tools for intervention in childhood trauma, PTSD (Post Traumatic Stress Disorder) and abuse

There has been a promising growth in empirical studies of AAT for trauma, including PTSD. Several studies undertaken with children and dogs and horses have shown positive outcomes, resulting in decreased symptoms of PTSD and depression (Hamama et al, 2011; McCullough, 2011; Dietz et al, 2012; Nevins

et al, 2013, Kemp et al, 2013) as well as increased resilience, happiness, sleep, social support, (Nevins, 2013), coping, subjective well-being (Hamama et al, 2011), and self-sufficiency, (Ballureka et al, 2014). However, the methodological rigour in many studies is said to be low in quality and in its early stages for establishing feasibility, efficacy and manualisable protocols, (O'Haire, 2015). This largely scientific and positivist lens fails to capture the nature and essence of lived experience and as the study results demonstrate, they are significant in terms of quality of life and subjective well-being. As Weston, (2010: 346) reports, the presence of a dog in a therapy session can make the experience more pleasurable and productive, improving therapeutic outcomes. She states:

'They (the children) all loved Tilly (the therapy dog) and liked having her in their sessions and felt her *presence* (author's emphasis) helped them in some way to feel welcome, to calm them down if they were angry or upset, to feel good.'

Similarly, Schneider and Harley, (2006) demonstrated that the presence of a companion animal (dog) can enhance the perceptions of therapists. This phenomenon has been explored in terms of Rogers's Core Conditions and the 'emission' by dogs of unconditional positive regard (often attributed to dogs), being non-judgemental, providing warmth, empathy and congruency, (Friesen, 2010; Jenkins et al, 2014).

The approach to treatment of childhood sexual abuse in terms of therapy has found that children often disengage with Cognitive-Behavioural Therapy (CBT), (Murphy et al 2014). The use of AAT is gaining recognition, overcoming barriers associated with retention and engagement, (Signal et al, 2016). It is considered that dogs can help children practice adaptive behaviour patterns (Minatrea and Wesley 2008; Morrison, 2007; Paris-Plash, 2008) and potentially alleviate the stress linked to shameful or sensitive disclosures, (Kruger, Trachtenberg and Serpell, 2004). Although these are very important findings,

the concept of therapeutic 'touch' is sadly neglected and given the sensory disposition of children and how they experience the world through their embodied experiences, this is a notable lack of innovation as dogs can afford 'touch' in a way in which humans cannot, (Levinson, 1984; Montagu, 1971), aiding healing and development. As therapy dogs also enable the building of trust, the bringing of the child into the present, and can diminish the power differential between the therapist and child, these are major areas which require greater attention in research, (Stewart, Chang and Rice, 2013)

Dogs in schools and in the classroom (behaviour problems and emotional well-being)

The positive effects of child-dog interactions have been explored and transferred into school settings. There are several studies which support the use of dogs in scholastic setting. These have been completed in the USA, Austria, and Switzerland. Within the UK at the start of this research dogs in schools was relatively rare, however, anecdotal evidence has generated interest with the RSPCA and Dogs Trust providing guidelines around dog welfare, (RSPCA 2019; Dogs Trust, 2019). From an educational perspective, scholars have also offered insights such as Gallard, (2019) and Lewis and Grigg, (2021). Decreases in problem behaviours have been demonstrated with the presence of a dog in a classroom. These behaviours include a reduction in aggression and hyperactivity and an increase in social integration, (Hergovich, 2002; Jalongo, Astorion, & Bomboy, 2004; Kotrschal, 2003; Tissen, 2015). A significant increase in empathy has also been observed, (Tissen, 2015). These studies used similar methodological designs, being experimental in nature, having a control group and being conducted over an average of 8-10-week intervention period. Classroom numbers ranged between 16-24 children, aged 4-6 years. Two studies which looked at the benefits of dogs in the classroom for children with developmental disorders, (Walters Esteves and Stokes, 2008) and severe emotional distress respectively, (Anderson & Olson, 2006). As well as replicating similar findings which cite increases in prosocial behaviours and communication, Walters Esteves and Stokes, (2008) also report the potential of skilled dogs to act as teaching assistants. This particular study has argued persuasively for a 'Canine Curriculum'.

Four interesting studies of pre-school children's specific cognitive functions have been examined, (Gee, Church, and Altobelli, 2010a; Gee, Graspki, DeJesus and Riley, 2012; Gee, Crist and Carr, 2010b; Gee and Johnson, 2007). These finding speculate as to the improved performance of children in terms of object recognition, memory tasks, and speed and accuracy to complete motor skills tasks, whilst a dog was present within the classroom. It is postulated that dog's model overall calm and obedient behaviour, increasing focus and attention, reducing distraction and enhancing performance. The possibility that there is a link between the development of gross motor skills and language is also significant and the potential of dogs helping children to develop language skills warrants further analysis. Additionally, one of the studies deduced that not all of the children were overtly drawn to the dog, suggesting that they still benefit from the dog's presence. This infers that there is something very unique about the 'presence' of a dog. Once more, the mechanisms, or conceptual framework of this recurring theme have not been fully examined in the literature.

As Lupton (1998: 32) highlights, bodily 'presence' or manifestation is crucially important. Bodies constitute a constellation of bodily feelings and she succinctly states:

'indeed, language can frequently, sadly fail our needs when we try to articulate our feelings to another person'.

A study to elicit teachers' perceptions of using animals in the classroom has been a useful contribution to the field, (Daly and Suggs, 2010). Teachers were surveyed and found to support animals in the classroom as a means to humane education and promote empathy development. As teachers have an influential role in the implementation of programmes which include dogs in classrooms, this is an area which could be examined in the UK as such programmes lack funding and equity nationally, (Pets As Therapy, 2017; Dogs Helping Kids, 2019). One study conducted in the UK, looked specifically at the pedagogic value of children reading to dogs, (Hall, 2016). This comprehensive systematic review of the literature reiterates the previous point about the exact mechanisms (of any effect from dogs in settings), remaining a matter of supposition. This is said to be largely due to the type of research methodologies used, and inappropriate control measures to enable sound causal inferences to be drawn.

In returning to the benefits to child development, it is clear that dogs can influence children in several ways. Social-emotional and cognitive development theories offer frameworks in which hypotheses about children's interactions with dogs can be embedded. These are strongly anthropocentric and can be considered as follows:

- Ecology model Brofenbrenner and Evans, (2000)
- Cognitive theory Piaget, (1983)
- Attachment theory Bowlby, (1969); Cassidy and Shaver, (2008)
- Socio-cultural development Vygotsky, (1986)
- Biophilia theory Wilson, (1984)
- Animal connection concept Shipman, (2010)

An integration of all of these ideas could be captured in the process model created by Belsky, (1984). As highlighted by Endenberg and van Lith, (2011) this encapsulates all of the influential theoretical frameworks identified, demonstrating their interaction and network of connections in the wider determinants of child development and the influence of companion dogs/animals.

Clearly, a pluralist approach, or pluridisciplinary perspective which Deleuze and Guattari, (1987/2013) endorse, is required. This pluridimensional image of thought supports my navigation between the abstract and the concrete, providing a material ontology, post-structuralist paradigm and portraiture.

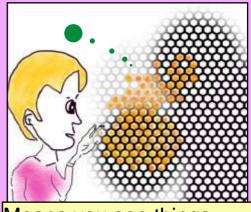
In summary, the material culture of children holds significant insights in the spatial and relational aspects of childhood well-being. Through appraisal of the literature around both child-dog interactions and the material culture of childhood we come to appreciate that objects, both human and non-human, are significant in the vertical and lateral axis of relationships (Mitchell, 2003). As Hohti and Osgood, (2020) also assert the animacy of objects is an interesting and revealing aspect of child-animal relationships. The idea articulated by children in Hohti and Osgood's study that animals "have something inside" aptly links to the very notion of vitalism and how children could indeed perceive and possess an idea of the 'liveliness' of being in the world as important to them, (Hohti and Osgood, 2020:12). This will be explored further in the forth-coming plateaus.

Plateau # 1 Part B Concerto Summary...

Reconfiguring relationships from a lateral axis and Deleuzo-Guattarian plane. In conversation with Deleuze...

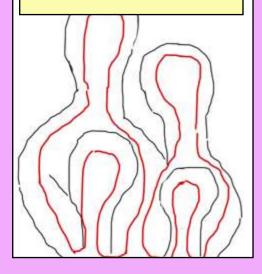




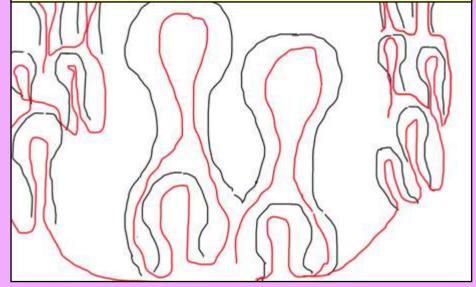


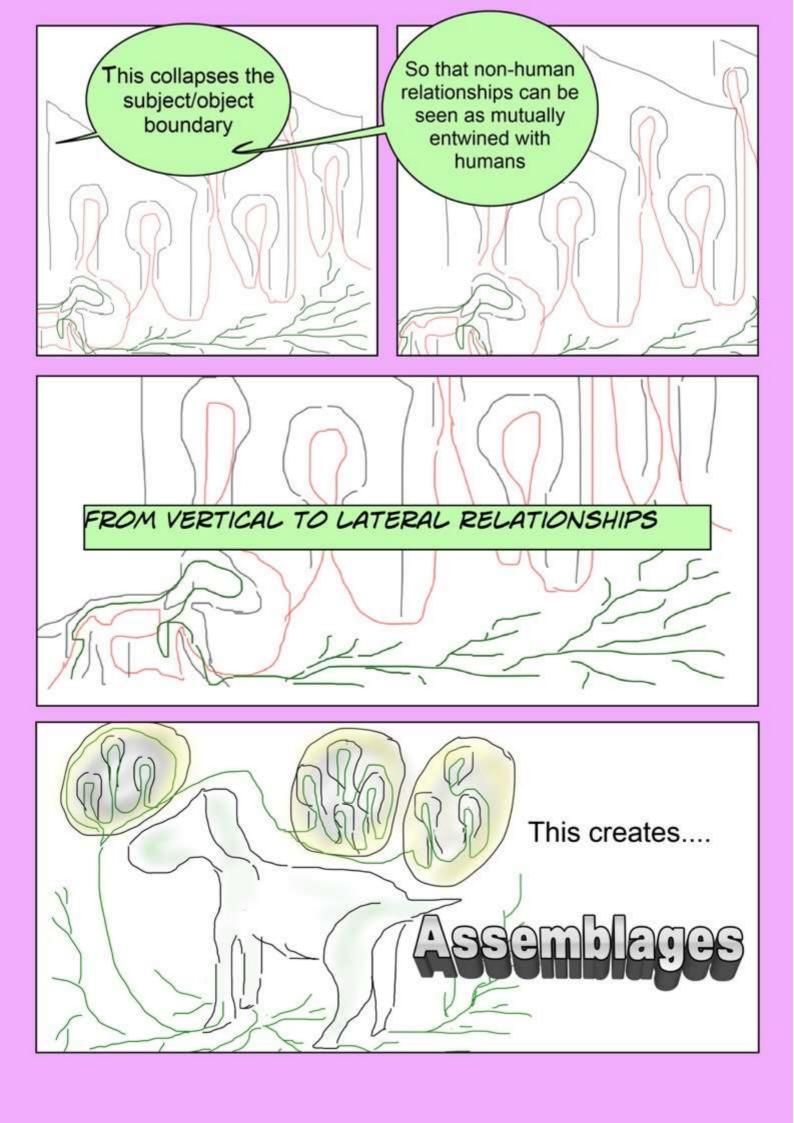
Means you see things differently, you see connections, segments and rhizomatic ways of becoming.

The family system of attachments...



...are reconfigured as assemblages, relational entanglements





PLATEAU # 2 ENSEMBLE METHODOLOGY, INSTRUMENTS & TOOLS

THREE-PHASE EVENTS:

- I. The moment (event) and enactment
- II. The 'etudes' and animation
- III. The reading
- + Researcher body 'self' as data creation and Ted's body as a site data collection

What is a three-phase event?

In keeping with the rhythm and cinematic style of presenting data, I used the idea of them being 'three-phase events'. By this I refer to how they are emergent, unfolding moments and enactments which I observe and attempt to unflatten and animate through my etudes. I then 'read' these moments as narrative, storying in a non-representational way. In doing so, I am paying attention to how Deleuze and Guattari and Bergson has sensitized my view of moments as time, which is fluid, always flowing in never ceasing rhythms, seeing it instead as a duration, not measurable, incomplete and infinite, (Deleuze and Guattari, 1987/2013; Bergson 1950).

I offer the following overview of the multiple approaches used in answering the research questions. I do so with the caveat that I consider duration is ineffable and can only be shown through image that never can reveal a complete picture. These are my approaches in attempting to explore the child-dog assemblage and phenomenon through simple intuition of the imagination.

Plateau # 2 ENSEMBLE: METHODS OVERVIEW PAGE



A plateau with an interest in child-canine interactions, affect, portraiture and visual methods

Introduction

Within this plateau I open up my ontological and epistemological senses further in order to create a rhizopoesis – a playful compilation of data collection methods. Such an approach to data collection is required to reveal, expose and bring forth the 'materialisation' of affect – a challenging aspect of experience that can go unnoticed and unknown due to its very nature and transmission being a *felt* sensation which can go *uncognitised* and *unthought*,(Hayles, 2017) similar to the botanical metaphor (Deleuze and Guattari, 1987/2013) and hidden

119:91

In order to do so I initially exemplify ethnography as my methodology from the ongoing emergent post-structuralism, post-human, and new materialism paradigm. Together these elements constitute a perfect fit, a symbiotic meld of required approaches in terms of exploration and illustration of process and thus, reveal the *mechanisms* involved which constitute new discovery and knowledge within the field of human-canine interactions, and now (new) knowledge (ontology) is acquired. This is an area which has been highlighted as significant in methodological application (Gee, 2018). I consider how onlosophy is comparable to the art of the portrait, (Deleuze and Guattari, 1994:55). The word comes from the French 'pourtraire' and aptly means to draw forth, reveal, to expose. As Zdebik, (2012: 99) so wonderfully describes:

Feature covers one part of the elements of portraiture, which is the facial characteristics, but does not cover the atom essential to portraiture, the stroke of a pencil or brush that is part of the process....trait, then is as pluridimensional as dia. It is not at and intuition: it is direction and depth (own emphasis).

Therefore, my train is one of an accumulation of lines through drawing -like the cartography of a map- diagramming the assemblage direction, depth and intensity. It is the process of re-configuration and transfermation in which the child-dog coupling

(akin to the wasp and orchid) depends on a particular functioning, the *allagamatic;* the function between two states and the idea of changing form from one state to another through a diagrammatic process, navigating between the actual and the virtual (Simondon, cited by Zdebik, 2012: 25). This map is emblematic of the rhizome and shows a moving through space and time.

Thus, the idea of movement, rhythm, direction and depth amplify the researcher's embodiment in the method, becoming an instrument and tool through the drawings and sketching's, as process, to sharpen perception to the affective experience and phenomenon. The sensory and tactile aspects can then be an immersive element in this process, (Pink, 2009). Pink also advocates the incorporation of visual ethnography as an essential ingredient of fieldwork, (Pink, 2013). These visual data will be gathered through my own sketches (embodied) which I call 'etudes' (drawing exercises) as well as multi digital media from a Go Pro micro camera provided for both the children's use and Ted (mounted on his harness). The Go Pro enables photographs and video capture. The idea of embodied ethnography- the researcher learning and knowing through their whole experience- has been acknowledged widely as a methodological process which attends to important aspects of practice, (Ellingson, 2017). Using the body as a site of knowledge production and what I term 'a vector of knowledge production' is a key component of my methodology as I seek to become immersed deeply (through thick descriptions of events) as a participant-observer in the phenomena. These take the form of inscribing fieldnotes as well as etudes, a further documentation of bearing witness to events. The ethnographer as a research tool and instrument 'is a most sensitive/and perceptive data-gathering tool, (Fetterman, 2010: 33). This is something which Gherardi asserts as being underdeveloped in studies which seek to illuminate affect and our understanding of material encounters, (Gherardi, 2017). As Fetterman (2010) purports, ethnographer's who utilise material theories observe behavioural patterns and cultures. Hence, ethnography is both a method and a product. It entails wonder and curiosity and working with children for long periods of time through fieldwork can be intense but provide research that has 'validity and vitality', (Fetterman, 2010:39). Indeed, it can make visible the unnoticed and sometimes banal aspects of everyday life. Rich, thick descriptions can

portray a sensory landscape which can be comprehended and grasped. In doing so, through a posthuman and new materialism lens, as well as a walking ethnography, I attempt to gain not only the children's voices and narratives but also the essence of Dave-Tails-Ted's voice which embodied research affords.

This embraces walking in the environment and has come to be known as a fruitful approach to ethnography termed 'walking ethnography', (O'Neill, 2008; Edensor, 2010). Walking can enable ethnographers to pay attention to the sensorial nature of place and space, a useful element in terms of appreciating Dave-Tails-Ted's umwelt, (Pink, 2013). In moving through the environment, being part of it, the production of data can be obtained as a lively biography for both the ethnographer and participants. This also means that aside the ethnographer's gaze, participant knowledge is detailed and can produce insightful and meaningful understandings. Thus, ethnography that is interactive is unobtrusive and collaborative, (Fetterman, 2010).

In order to aspire to a Deleuze-Guattrai rhizopesis (bring into being, visual-materiality of relations, to make) production, I am aware that unlike traditional academic writings, this becomes emergent and dis-organised; in so far as, it values a constant questioning of what constitutes 'truth'. Thus, crossing of boundaries, and opening up of space(s) for alternate ways of seeing to enable liberation and deterritoralisation from discourses which promote governance and structurallem, (Rose, 1999). It is, as Law states a 'messy' endeavour, as reality is unpredictable and fluid and invariably 'methods' produce the reality we try to understand. He also emphasises the 'body' as an important form of 'knowing', (Law, 2004:2). This production and 'kaleidoscope of impressions of textures....reflects and refracts a world that in important ways cannot be fully understood as a specific set of determinate processes', (Law, 2004:6). The insights of Mcphie further endorses this in his 'birth of Mr/Messy' detailing how we create rather than represent or interpret data, (Mcphie, 2019:95). Thus, this thesisassemblage strives to be rhizomatic but acknowledges that in its very academic formation there are limits to its dynamic ontologisation. In its creative trope, I seek to engage the reader to both read and think in a non-linear, un-structured and dis-organised way, choosing their own visual/textual journey in whichever sequence they

wish. This process in itself allows the readers own 'lines of flight' to emerge as dynamic and de-territoralising, evoking a post-structuralist perspective.

Such a research paradigm can also be described as 'new materialism' which embraces a pluralistic and eclectic mix of ideas from various disciplines that encompass elements of actor-network theory (Latour, 2005), artificial intelligence (Haraway, 1985) evolutionary theory neuroscience, post humanism (Braidotti,2013) quantum physics (Barad, 2007) and Spinozist monism, (Massumi, 1996; Coole and Frost, 2010). These shape and influence both my ontological (how the world comes to be) and epistemological (how I seek to gain knowledge of the world) positions. My appreciation of these disparate threads foregrounds an appreciation of what it means to exist as a material individual with biological states, within a world of natural and artificial objects. In doing so, I hope to dissolve the nature/culture, mind/matter boundaries. This is key when attempting a non-binary approach.

Data Generation and Diffraction: flexible and emergent

The researcher's protocol can be viewed as a map to guide the journey and process. By bringing together affect theory with Deleuzian-Guttiarian, (1987) philosophical concepts (such as rhizome and a Body-without-Organs) helps to understand how they fit together to produce and reveal new situated knowledge through ethnographic, participant-observation. Such an 'insider' and 'emic' perspective, becoming deeply immersed in the culture, provides a deeper understanding of what the children and Dave do, and why they do it. It draws me to multiple ways of being and 'seeing'.

The intertwining of Deleuzian actions is seen in the example of the rhizo-matic movement involved in pendulum painting (see research protocol: table 1). Such an exposition enables the production-meaning making, new knowledge and understanding. However, it quickly became apparent that I needed to be adaptive and flexible during the creative moments with the children and my research changed in response to the children's requests and conversations with me. In this sense, it was primarily driven by the children and as the workshops and fieldwork progressed, they enacted

greater autonomy. This is evident particularly in workshop three when they envisaged a comic with which to tell their story of having Dave-Tails-Ted in the classroom with them. This giving of greater autonomy to the children also included use of the GoPro camera, when the class teacher and I were happy to give them control in when and how they used it. In this way, the research became emergent and free flowing, indeed rhizo-matic, and generated new lines of inquiry. Through this playfulness with the camera as a research tool, events unfolded spontaneously and any strict adherence to a protocol did not seem pivotal to the overall emergent process.

Ethical Framework and Protocol

Adherence to an ethical framework and protocol is fundamental to any research process. I have paid particular attention to being constantly reflexive ethically during my fieldwork as an ethnographer and participant-observer. There are various times that were pivotal ethical moments during the fieldwork, and I have included these as 'Ethical Etudes' which relate to the principle of anonymity and the dilemma of a dogs name (see p. 36), the principle of power-dynamic shifts in my ethnographer-child relationships (see p. 196) and power and non-maleficence in fieldwork related to use of appropriate touch, physical contact, and child and animal safety (see p. 234).

In addition, the principles of consent were considered carefully. Parents gave consent for all the Year 4 and Year 6 children to be involved in the study with clear information provided about the children being able to 'opt out' or 'withdrawn' at any point in the research process (see documents in appendices). As I consider children to be social actors and decision makers, valuing their own sense of 'self' in the process, I took time at the very early planning stage of the research to meet with the year groups and gained what is termed 'assent' from the children, (Baines, 2011). This is a way of enabling children to give their own consent (in addition to their parents) and I also provided them with a visual information sheet (see appendices). This was important to me to enable the children to feel empowered and safe. I also wished to recognise their autonomy and establish a trusting, caring relationship with them. Whilst all of the children gave 'assent' to being part of the study I am aware that if a

parent had not given consent and a child had wished to participate then an opportunity to discuss the child's wishes would be something I would wish to share with the parent. Ultimately I would respect both parent and child and hope that they could reach a mutual agreement.

Of course, the classroom dog Dave-Ted-Tails is also afforded the same careful consideration, although his consent was rather more difficult to ascertain in terms of the usual ethical documentation and consent signatory. However, what I realised was that Dave-Ted-Tails could indeed consent in other ways, such as communicating through his body language and vocalisations. I am also respectful that Dave-Ted-Tails has dog cognition so can understand many of my words, requests and intentions from facial expression and movement, (Berkoff, 2007). However, this is unique to his own experiences and umwelt. I therefore asked his permission before applying the Go Pro harness and observed and monitored his wellbeing and safety whilst he was wearing it. Any signs of distress (such as panting, whimpering, lowered ears, cowering, tail curled under, snarling, barking, circling, excessive licking) who be addressed and the harness/Go Pro removed. There were no apparent instances when this needed to be carried out and Dave-Ted-Tails enabled his own unique spatial and kinetic perspective to be captured on video camera.

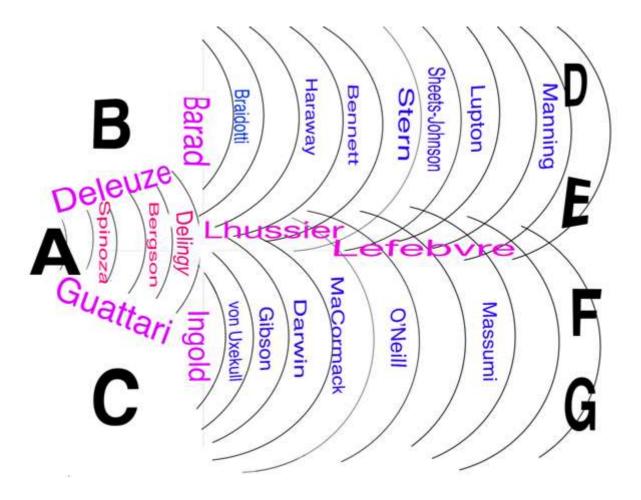
What are we looking for?	- 1 1 1
Movements	Embodied
What sorts of activity will be consistent with m Deleuzian actions	What we do?
1. Rhizomatic, nomadic movement (or thinking)	> Mapping, diagramming. > Draw lines to show mapping of walking with dog (with and without) Using classroom floor plan. > Pendulum painting or bubble painting.
2. Territoralisation > deterritoralisation	 Stretch, cut, colour, tear, overlay. Marble/ball-bearing paint and box activity. Use of string, ribbon, wool, or sticky dots to map movements from one space to another.
3. Body-without-Organs	 Mapping child-dog movements. Drawing and diagramming shared places in the classroom. Use of 'GoPro' body cam to depict lively biographical movement of both dog and child.
4. Smooth and striated spaces	> Show texture of spaces with using craft materials such as silk fabric, cotton wool, fuzzy felt, feathers, ribbon, foam, polystyrene plastic (smooth) or beads, sandpaper (rough/striated), glitter, buttons, corrugated cardboard, bubble wrap.
5. Lines of flight	 Bursts and bolts of energy through splashing, zig-zagging lines and artwork, doodling, building blocks. Moments of action like walking, dancing, building, constructing.
6. Folds	> Folding of paper> Folding or bending of craft wire,pipe cleaner to sculpt body or object.

Imposter-syndrome-becoming-ethnographer

This plateau also forms part of a paper presentation given at conference. This was my first opportunity to engage in further academic conversation with other scholars in the field of 'human-animal interactions' studies. Through other scholars' interest and curiosity about my post-structuralism and Deleuzian-Baradian onto-epistemology, (methodology) I was inspired by their wonderful and insightful thinking and their ideas of the 'subject'. This culminated in supporting my own thinking about what might appear a seemingly uncanny alignment of Deleuzeian and Baradian concepts. In effect, I realised that I was 'reading them through one another' in a diffractive way, as an ethnographer and with 'direct engagement in the world' (Barad, 2007:49). In doing so I affirmed my understanding of their concepts and philosophy, arriving at a point of viewing 'diffraction' as a layer or bending given through the example of a wave (light, water or sound) as it moves over an obstacle (breaking- apart and coming/putting back together). In this process the wave is essentially reconstituted (through layers of waves over one another, combining, entangling, forming a 'new' or 'differently' constituted wave), with past-present and future 'folds' (that to come) and be/come a different pattern, and something more.

It is this difference that can be seen as an 'agentic cut' – observing this cut long enough to witness these heterogeneous differences as it re-configures itself, as it were. Indeed, my own 'becoming's' as a researcher and lecturer became fundamental as part of this intertwined and entangled process, not being separate or 'outside' the research process but part of it, in deep immersion both in the 'field' and as an embodied 'participant-observer'. A fascinating example of such 'cuts' is provided in the work of artist Tarsh Bates, and how each images of mould blobs and tendrils are cuts out of and part of the world, as they seek to live and proliferate, (Bates, 2015). By reading Deleuze and Barad diffractively, I was able to apprehend a different way of knowing and a different way of seeing the phenomena of the child-dog encounters in new and emerging ways. It provided a praxis with which I could witness multiple 'beings' in the classroom, thus layer and not construct social relations and intra-actions. Fundamental to this was developing the operational idea of intra-action from a deeper understanding of agency. Through *intra-actions* we are agentic, we do not

possess agency outside of this realm as in thinking of *interactions* with each 'unit' having a separate singular status, as with Deleuze's idea of 'singularity' of beings. These 'differences' in considering agency (and hence agential realism) is both relevant and interesting. When reading both Deleuze and Barad both exhort complex text and acumens, and my thesis-assemblage is an account of how these have shaped and influenced the research process. It is my own interpretation of their work, my own 'rhizopoesis' emergent from it.



As Barad aptly comments, "diffraction is not a set pattern, but rather an iterative (re)configuring of patterns of differentiating-entangling", (Barad, 2014:168). It is the making and creating of something new. Importantly, the idea of diffraction also differs from the mere reflexive nature of researcher inquiry, and Haraway and Barad support such a distinction in the production of situated knowledge, (Barad, 2007; Hara-

way, 1988). The idea that we are producing something *other* than sameness (mirroring) is an essential consideration as photographs, as an example, can be construed as copies and an illusion of (fixed) reality. It is through reading them (photographs, drawings), diffractively, through one another that difference and new insights emerge materially. It serves as a productive, performative, rhythmic approach and technique for thinking about nonrepresentational methods.

Meeting Barad-Bohr in alignment (halfway) with Deleuze

Barad's, (2007) approximation of agential realism and Deleuze's favour for vitalism allow for greater and materialist exploration of social phenomena and social assemblages, thus enabling a robust account for *all* bodies, human and non-human. Barad's work is propelled by that of Neils Bohr, the renowned physicist who further described the constituents of the atom. It is through reading Deleuze and Barad through one another diffractively that I began to make significant *alignments* with my conceptual and theoretical framework and this alignment is in part attributable to Bohr's vision of atoms entwined and in constant movement with protons, electrons and neutrons. I invoke similar ideas in images of thought, and in terms of how I use and re-work Deleuze's explanation of the *planomenon*.

Initially, I considered how the children's research workshops were 'plateaus' or a meeting place or 'plane of consistency' in practice, (Deleuze and Guattari, 1987/2013: 84). Although it could still be regarded in such a manner, through further agentic cuts which involve a pushing of boundaries and indeed uprooting from and detaching from the substratum, I prefer to call these becoming-*planomenon*. The planomenon's aim, in true Deleuzian fashion, is to drift, roam and function, "they rotate in all directions, like beacons" composing of desiring machines with increasingly intense, forced movements, driving them, (Deleuze and Guattari, 1987/2013:84). This planomenology, rather than phenomenology is therefore "the abstract line that clandestinely wanders through all of the real, connecting everything back to the being of difference – absolute de-terrorisation", Kotlas (2007). In reaching a point of rhizomatic wandering (walking) within and during the workshops and classroom setting, I envision the very process as the children becoming-deterritoralised, expressing, as

'lines of flight' and re-enacting their daily intra-actions with Dave-Tails-Ted (see table-top assemblages in Plateau # 3). The above visual seeks to challenge your ocular-centric perception by playfully making you oscillate between image and text, thus exploring the power of their synergy through their integration and entanglements.

The post-human paradigm: pitfalls and potentialities

To apprehend a more-than-human world, a post-human paradigm initially appears promising. It has the ingredients that seem to respond to the debate and aspirations to overcome human exceptionalism. There are some excellent examples within education which relate to the potential of posthumanism as a 'deterritoralised' pedagogy and this combination of Deleuze and Guattari's (1987/2013) rhizomatics with posthuman theory helps explain what a confusing, dense and challenging concept it can be, (Sidebottom, 2019 in Taylor and Bayley, 2019). Within Kay \$idebottom's work, she highlights the advantages of disrupting human-centered activities by suggesting an appreciation of all our entanglements in the world which allow for a shift beyond human story-telling to one of 'multi-species narratives' (Nords(rom, 201/8). This fits very aptly with this research-assemblage in how I attempt to take account of the affective nature of the child-dog relationship and the multi-dimensional aspects it involves within the classroom and learning environment. It reminds me that this is a material activity and therefore enacted as 'a methodology that is attentive to, and responsive/responsible to, the specificity of material entanglements in their agential becoming' (Barad, 2007:91). As Ted's potential to deterritoralise and disrupt the regiment spaces with the classroom through his dynamic form and vitalistic movements, I playfully consider him as a 'pet pedagogy' or 'pedadog' (this will be expanded upon further in Plateau # 4).

Kay Sidebottom, (2019) draws comprehensively on the writings of Braidotti, (2013) which is both compelling and innovative, yet I find myself in agreement with Van Ingen, (2016) that its theory/praxis has contradictions and irregularities. What Braidotti, (2013) draws attention to is the 'neo-vitalist' human, but it retains a tinge of human power and recognition. This could be counter-balanced with the term 'more-than-human' to denote this crucial idea of difference. This is something of a surprise, as I

considered post-humanism to afford this research-assemblage a new and noteworthy approach in de-centring the human beyond the nature/culture divide. Whilst I find it affirmative that Braidotti, (2013) helps us re-think binaries, and the position of humans in a bio-genetic age referred to as the 'Anthropocene', I do not think she goes far enough with regard to ethical and political structures. Power differentials expose oppression and these need to be challenged within the social order and hierarchy of structuralism. Her inclusion of Haraway's, (2008) original thinking and humorous cartoon about the Vitruvian dog merely serves to amplify the tension between the claims of post-humanism and its tenuous position in current discourses around critical theory.

George Orwell, (1954/2008) offers a salutary and chilling reminder through his sombre and cautionary metaphor and tale of 'Animal Farm' pessimistically provoking thoughts that both humanity and animality (that all things) can never be equal. However, Haraway's, (2008) philosophy provides renewed hope through her culmination of a 'companion species' manifesto. 'Mess mates' we are indeed! We eat at the same table in our 'becoming with' dogs, breaking bread together as it were, (Haraway, 2008:30). Our co-existence and social engagement with dogs are testament to this. It remains an oxymor about who actually domesticated who (Serpell, 1995; Bradshaw, 2018). As the current thinking by Lorimer, (2016) extends these propositions, and asserts, we are *microbiome*, this adds a further layer to the post-human movement. Humans are constituted of microbiomes and this mutual co-existence in itself questions the egocentric, as opposed to eco-centric nature of our existence. Understanding interspecies relations, the lives of animals and humans, can be considered, through their shared manifestations of power dynamics. As Hovorka, (2015) states we must look through key theoretical ideas and methodological approaches if we wish to explore and expand the ways to investigate interspecies relations and the lives of animals in academic scholarship. Similar to Haraway, (1988) and Barad, (2007) Hovokra, (2015) champions a feminist-post humanist perspective to shift beyond linguistic boundaries when trying to communicate participants creation of meaning. Through their intra-action (human and non-human), intertwined agencies are mutually co-constructed, (Barad, 2007). These affective encounters (child-dog

assemblages) and intra-actions can then be viewed as knowledge production, embracing a method which minimises distance between researcher and participants through ethnographic participant observations. In doing so, engaging a 'vital materialism' (Gibson-Graham, 2011:4) facilitates an enhanced empathic understanding of assemblages (children) and assemblage 'converters' (school dog), (Buchanan, 2014). Buchanan, (2008) describes how these intra-actions are transformative through assemblage converters entering the fold (such as Ted the School Dog). This assemblage **converter**(s) then offers and afford the (children's) assemblage a different becoming with(in) space and place. A **de-territoralisation** as it were. The converter allows flows of movement, alternative pathways and lines of flight. As Donovan, (2006) points out, animals do not talk, so in order for us to understand them we need to engage with them through affective approaches which pay attention to body language, eye movement, facial expression, tone of vocalisation or even stare, gesture and silence. Such a stance will enable what Lorimer, (2010) calls an operalisation of 'lively biogeographies' that cultivate interdisciplinary alliances to engage animals as mindful, dynamic and discerned beings which co-evolve and co-exist with humans. The affective elements and protocols, which foreground this projects knowledge production, not only seeks empathic understanding but an exposure of their physical materiality and embodied manifestation.

Detailed attention to the benefits of child-animal or child-dog interactions has been somewhat overlooked, despite the growing interest and body of research in the field of anthrozoology and the study of human-animal interactions with Gee, Griffin and McCardle (2017) and, Bradshaw,(2017) suggesting a need for more qualitative, robust research methods which are longitudinal in design. Scholars such as Gee et al, (2012) have demonstrated that the mere presence of a dog in a classroom can improve children's executive functioning and performance. Yet the precise mechanisms for this are yet to be known and explicated. This ethnographic (participant observation) rhizomatic and diffractive thesis-assemblage is an exemplar of doing precisely that- to explore, expose, reveal, illuminate and animate these important relational and embodied, interactional processes and mechanisms, seen, heard, and sensed

through children's perspectives and children's voices. In addition, by being literally "drawn to see" (through the use of sketches/etudes as embodied process) as ethrographer/participant-observer Lam engaging aesthetically with the fundamental embodiment and sensory nature of child-dog interactions and experiences through artwork, (Causey, 2017). As Sousanis, (2015) exports incredible images and innovative graphic shape-shifting examples in his ground-breaking 'Unflattening' project, he dismantles the flatness of sight and its one- dimensional state to open up the multiplicity and potentiality of space, time and experience; 'darting and dancing...animated and teeming with possibilities' (Sousanis, 2015:16). His emphasis is also upon the moving dynamic and mode of sketching between artist embodiment and production of image. This resonates well with artist Klee's idea of a line which 'goes out for a walk' making the abstract appear multidimensional, (Klee, 1961:103). As Sousanis so succinctly comments:

'By orchestrating the relationship between elements and the space they inhabit, we can trigger correspondence with experience both seen and felt. (Sousanis, 2015: 75)'.

This 'unflattening' approach and two-dimensional viewing of experience through a visual and affective methodology which goes 'beyond text' is significant; it opens up a greater appreciation of human and non-human relationships in terms of the multiplicity of experience or 'being' and 'becoming' in the world, (Sexton, et al 2017). This allows experience to be viewed as constantly evolving in states of 'flow and flux'.

Deleuze's interest in art and cinema can be taken and reformed as methodological praxis and become what Haraway (in recounting Derrida's inimitable experience with his cat) refers to as 'situated knowledge'- combining theory and social phenomena, (Haraway, 2008:23). Such an exposition enables the production of new knowledge and understanding. Through the animation of Deleuze and Guattari's abstract concepts, they become enactments, situated events that explore roles, making them meaningful and tangible, offering an alternative lens with which to view the complex mechanisms at play during child-dog interactions within the classroom setting.

Thinking with Barad and quantum field theory (QFT)

Using the insightful readings offered by Barad, (2007) on quantum physics has led me to consider how this also shapes a post human, post-structural philosophy. Thinking with quantum physics shifts us out of the human-centric and human predominant position. As Gullion states, quantum philosophy is 'grossly under-theorised', (Gullion, 2018:120) Barad's refreshing account of her notion of agential realism opens up viewpoints to how intra-action and relational aesthetics are key in crossing boundaries and divides in the Anthropocene. Agential realism informs us that matter-based processes can be the beginning for all kinds of critical inquiry. It deals with the feminist discourse of subject matter of authority and objectivity in science studies, as well as the complex vagaries of theorising the body (materiality) as a point of cultural production in post-structuralist, new materialism and feminist approaches. As these negotiations relate to visual methodologies, ideas of representation, performativity and matter-based processes, they are important. This relational ontology and approach is not quite the same as Bruno Latour's Actor-Network-Theory (ANT), (Latour, 2005; Martin, 2005) although they do share similar purposes, it considers entities to co-constitute each other through relational material processes – they intra-act. Barad, (2007) points out that the non-human (from electrons to boulders, slime moulds to elephants, ecosystems to galaxies, dark matter to atoms) exist without dependence on human awareness. In addition, by de-constructing the position of human exceptionality we must not leave the human 'behind' as Boyd (2015:28) asserts:

'starting with humanist theory may inherently cripple attempts to leave humanist philosophical tenets behind by remaining open to speciesism'.

Barad provides an alternative understanding of how 'material conditions matter', (Barad, 2007: 244). Fundamentally, this describes a relational perspective, for which her neologism 'intra-action' is a crucial process as previously stated. Taking this diffractive approach to methodology attends to the social entanglements between hu-

man and non-human beings. These practices, according to Barad are social-material enactments and viewing them as entangled collapses the boundaries between nature and culture/social.

My 'experiment' and data collection through/with pendulum painting could be seen as an attempt to demonstrate through quantum field theory, that a non-linear, and non-point relationship between space and duration can be materialised. Narrative and stories are animated and as Barad might say are hence 'apparatus', similar to a microscopic lens in a laboratory. The event in which the children are exploring their encounters (intra-actions) and relationship with 'Ted' is dynamically produced, allowing an unfolding of such narrative that is 'wild' and destratifying – a co-constitution and transformative experience for both child and dog (see Planomenon #1 pendulum painting in Plateau #3). This in itself becomes the 'refrain', a diagram of an event fitting together functionally, a setting-off of a rhizome, a breaking free from authority. This marking of territory produces regularity and repeated patterns of sound, place and space. It therefore becomes an affective space, an affective atmosphere, through its movement in the constitution of a territory. As McCormack, wonderfully (2013:55) illuminates:

'bodies have the potential to generate spaces in the process of their movement....moving bodies have an animating quality inextricable from space and time'.

This experience is affirming of the non-human, or more-than-human, engagement in the process of experience as it comes to matter and be of importance. It re-conceives relationships and de-constructs developmental psychology (Burman, 2016) encompassing a more-than-human perspective, one which can shift discourse from human behaviourism and exceptionalism and reconfigure 'attachings' as contemporary 'theory' (Duchinsky, Greco and Solomon, 2015a). Perhaps the concept of the *umwelt* by the pioneering, yet often overlooked, innovative biologist Jacob von Uexkull, (1992) further magnifies the significance of looking at things form a different angle or perspective (non-human) in his account of how animals in the same ecosystem pick up on different environmental signals. If we think of matter and organisms

as having their own *umwelt* (environment) which they experience as their own entire objective reality, then we begin to realise that human umwelt has limitations. Eagleman (2011) argues convincingly that this then overlooks many aspects of differing experiences in the world providing the example of a dog's olfactory prowess, compared to humans. In this example he asks us to consider the amount of information or affective experiences which go unseen or undetected, (I have previously referred to this as 'the space between'). As dogs have millions more scent receptors than humans, they have and *reveal* a different umwelt to open up our reality to become a bigger picture of meaning. We are therefore not just seeing reality from our own umwelt, we are tapping into hidden channels and as Eagleman, (2011, para. 1) states this bigger reality is called *umgebung* (surroundings, milieu).

As he asserts 'it becomes clear that our brains are tuned to detect a shockingly small fraction of the surrounding reality', (Eaglman, 2011, para. 6). Our human sensorium might be sufficient to get along in our ecosystem, but it does not see the larger picture. Hence our knowledge is limited, however, if we can materialise these differing umwelts through our becoming-with non-human and more-than-human experience, we can begin to imagine and materialise so many possibilities from appreciating the number of unseen encounters. This is Deleuze's premise of why it matters to consider the 'multiplicity' of experience, the multiple realities 'out there' do indeed matter.

Diffraction as (com)parable with Gestaltism

As I am far from being a physicist, in order to connect with diffraction as an ethnographer, and indeed position myself in diffractive ethnography, I confer with Gestalt therapy (a more familiar concept to me therapeutically) to gain a parable alignment, (Perls, 1969). Through this I can further explore the fact that I am the researcher and ethnographer, being and becoming the instrument of embodied experience, an observation tool filtering or 'cutting' scenes and events of reality, giving form to that reality through relational intra-actions. This is crucial to acknowledge, that my presence as researcher (similar to the children and Ted) means I become-with the research - an active force in the creative thesis-assemblage.

By engaging as such, I can begin to show how enactments (experiments) completed in the workshops with the children and Ted are somewhat analogous to the *two-slit experiment*, a classical insight into the nature of how waves and particles bend and move, simultaneously, thereby creating a diffraction in patterns on a screen. These waves occupy the same place at the same time and collide into one another, superimposed and combined (not mixed) they are entangled and intertwined, 'becoming with' one another to create new patterns.

The physics of Bohm, (1951) connects quantum mechanics and cognitive modelling, and whilst this is once more beyond my own disciplinary field, I find that through a transdisciplinary or pluralistic approach I can align my thinking with that of Gestalts and its theory of mind, on how both mind and matter emerge from this re-configuration. I take Barad's example from her use of Bohr's ideas to further read Bohm's and Fritz Perl's ideas through one another, diffracting them. A gestalt, like a rhizome, consists of heterogenous multiplicity, it has no beginning and no end (only milieu's). As Sabar, (2013:7) highlights, the 'gestalt experience cycle' has been taken from philosophy and psychology into the vagaries of therapeutic practice, (Perls, Hefferline and Goodman, 1951/1990).

Gestalts are considered to be related to perception, process and meaning making, a looking at our own existence, creating our own meaning and reality from our interplay with (your gestaltism), our own place and body awareness, re-configured with and through intra-action with other gestalts. These 'gestalts' are often depicted as circles or spheres, which I have referred to earlier as 'rhizospheres'- globes of heterogenous elements coming together to form an assemblage; fields of the virtual actualised through their relationship with one another. Like the rhizome, which breaks off into lines of flight making further connections, the gestalt space can be broken and shattered, like a bubble bursting as it collides, joins and connects with another gestalt to create a new gestalt (or diffractive pattern), co-constituted, transformed, becoming-other, becoming-more. There are indeed similarities here with Sloterdjik's ideas of bubbles on an existential premise and expansive plane. However, my own

re-configuration relates to the ontology of knowledge and post-structuralism philosophy, (Sloterdjik, 2011). As such, it renders visible our entanglement in the world (that which is behind the visible – our own gestalt), as Sabar aptly puts it these gestalts enable an "aha moment", a moment of discovery, (Sabar, 2013:7). This is not just a space in the conventional sense, but a place where relationships between objects of divergent process are formed. This new formation can be said to bring into existence a moment of fusion of the self with another. Buber, (1947/1955: 203) cited by Sabar, (2013) refers to this intimate connection as *the between*.

Rather like my etudes of the children snuggling in with Ted, their bodies appear to merge in an intimate moment, folding into one another, the here and now of the event which I have re-enacted (Barad, 2007) through my own 'lines' (sketching) and embodied entanglement. I have from the outset referred to the 'space in between' in my initial development of a conceptual framework, (Carlyle, 2017). A virtual space of becoming-with one another. It now has an uncanny resonance and alignment with Buber:

(s)omething takes place between one being and another the like of which can be found nowhere in nature...It is rooted in one being turning to another as another, as this particular other being, in order to communicate with it in a sphere that is common to them but reaches out beyond the special sphere of each. I call this sphere....the sphere of "between"...It is not the wand of the individual or of the social, but of a third which draws the circle round the happening. On the far side of the subjective, on this side of the objective, on the narrow ridge, where the I and Thou meet, there is the realm of the "between" (Buber, 1947/1955:203-204 emphasis in original), cited by Sabar, (2013: 24).

Similar re-enactments to my ethnographer 'lines' are integral to gestalt therapy and credence is also given to experiments, experiential work and embodiment. Perhaps the most well know of this approach is when consideration is given to 'unfinished business' (an example of which could be unresolved grief) where the client is offered an 'empty chair' scenario with which to re-enact an encounter with the deceased, thus forming a new gestalt from the actualisation of the virtual, (Perls, 1969).

The crossover and alignment of quantum field theory, new materialism, psychoanalysis, and philosophy are unambiguous. Through a diffractive lens, Gullion (2018) has provided an illuminating way in which to operationalise and visualise complex phenomena. Through reading concepts and theories through one another diffractively, I have re-configured my own ways of knowing and my own ways of showing significant aspects of child-dog relationships. By doing so I create an essentialist portraiture through rhizomatic and diffractive ethnography. This subject-subject relationship was an ethnographic observation and thus an embodied and emotional encounter. It provided my own 'empathic attunement' to the 'attunemet' between child and dog, (Rowe and Mac Isaac, 1989/1991:40).

The Multi-species, Inter-species (Post-human) Visual Rhizomatic & Diffractive Variants of Ethnography

Ethnography literally means 'a portrait of people'... An ethnography is a written description of a particular culture- the customs, beliefs, and behaviour-based on information collected through fieldwork' (Harris and Johnson, 2000:77-78).

We take imaginative and creative ethnography as points of departure- an invitation to live differently, to animate spaces, classrooms, and stages, to listen carefully to the lives of others, to use humour and imagination to write, picture, and perform the world alive. (Centre for imaginative Ethnography, 2016).

The roots of ethnography are firmly planted in the fields of anthropology and sociology. It is a social science methodology and involves up-close, personal experience and possible participation, not just observation, by the researcher (Gobo, 2008). However, such historical roots have somewhat been remiss in their inclusion of non-human or multi-species. Animals in anthropology have surprisingly been without agency, being passive and viewed as raw material despite their apparent cultural and kinship ties, (Hoske, 1993; Segata and Lewgoy, 2016). The anthropological works of Margaret Mead (in Hockings, 1995) in her studies of forgotten tribes and cultures exemplify the human-centric, whilst just touching upon the ideas of a more-

than-human society. This may be attributed to the structural and linguistic elements retained in initial development of ethnographic approaches as these were very much laden with the flavour of Saussure and the idea that speech and language, signified and signifier and its affordances giving humans their 'exceptionalism', (Saussure, 1992).

However, the challenges of this thesis-assemblage are in depicting how looking through a 'multi-species' or 'cross-species' lens can be achieved to ensure both the children and Ted are both engaged in the process to redress this imbalance and 'decentre' the human. This important aim acknowledges nature and culture/society as bound together so that 'mapping and theorizing specific forms of non-human difference and situated human-animal relationships' are realised (Lorimer and Srinivasan, 2013:336). Including Ted as a methodological axis of difference in the research offers a potential mechanism to understand and redress forms of human exceptionalism. In his embodied canine form, he produces movement (and non-human data) differently, altering our human perspective of space and time. This involves capturing animal action (use of a GoPro micro-camera attached to Ted's harness), agency (affect), and reconsidering Ted's role in social/human life. This 'canine-cam' generation of data quite literally helps us see things through a non-human lens. His lively biogeography and non-human charisma animated in action, (Lorimer, 2007). It also resonates with the concept of acquiring a 'zoontology' (Wolfe, 2003) 'zoon' being Greek for 'animal' and how my ontology is not just about human ontology but also that of Ted's. Deconstructing anthropocentrism on the one hand and paying attention to the transformative aspects of animal-human difference on the other. A philosophical nomadism to manage and negotiate the organisational and stratificatory nature of the classroom. The emergence and significance of zoontolgy is discussed in my final plateau, Plateau #4, 'Rhapsody and Refrain'.

De-centring the human and childhood: Being more-than-human

In agreement with Ingold, (2013) I find the term 'multi-species' somewhat misses the point, as does Latour's, (2005) depiction of non-humans as 'agents' and 'actors'. Hence my continual crossing out of terms to define my particular 'brand' and different

kind of ethnography. This may seem a trivial thing, however, it matters that through my weaving and rhizo-connecting through the multiple meanings provided in the literature that I testify to the inherent and somewhat confusing lack of non-human beings being provided an egalitarian position in name only. As I break from some connections and find lines of flight in other sources this endeavour is still something which could continue in an ever-changing flow and flux that is characteristic of Delueze and Guattari's philosophy.

As Ingold persuasively asserts, the term 'multi species' is problematic in that it moves contrary to the Aristotelian order of difference implied by having a taxonomy of species. In addition, he purports that the theoretical understanding of anthropology exceeds the descriptive distinctiveness of ethnography, as he calls for an 'anthropology beyond human', (Ingold, 2013a: 15).

In a not too dissimilar vein, Kohn, (2007) proposes 'an anthropology of life', in order to expand the influence of ethnography beyond the human through an embodied understanding. This is also highlighted by Von Uexkull, (1992) and his ideas of sensory, motor (rather than acting) movements and embodied relations. This more accurately denotes this ethnographic approach, which I have chosen to describe as 'rhizomatic' – a connecting of concepts, relations and ideas, constantly crossing, knotting and weaving alongside each other.

Whilst the idea of 'rhizomatic' or 'rhizomic' ethnography has been used effectively before (Griffiths, 2009; Strom, 2015; Bailey, 2017; and Sellers, 2015), it has not yet been clearly explicated as a concept. The same could be said for 'diffractive ethnography' which has only recently been explicated by Gullion, (2018). Paradoxically, rhizomatic ethnography can have differing and emergent 'becomings' within research methodologies, due to the very nature of its botanical metamorphosis, which create multiple narratives. It is this 'multiplicity', which is a key component to its epistemological position within this research. It is the exaltation that there is no one 'truth' that makes ethnography such a creative and versatile methodology. As with rhizomes, it can link and connect to various contextual practices. An exemplar of this can be

found in the research of Corsrao, (2003). Through his ethnographic, participant -observer stance he describes how his place in the classroom uncovered a particular peer culture, which wonderfully elicited the children's sense of agency, much to the envious eye of the teacher, Corsaro, (2003) became accepted into this peer culture. Through his acceptance, he became privy to information that was not otherwise known or forthcoming. In a similar vein, my own participant-observation and use of 'etudes' placed me in an unintentional position of curiosity. My storying emerged in relation to diffracting posthumanism.....

auffracting post-humanism



Leonardo Da Vinci's Vitruvian man (Clayton, 2019: 59) became emblematic of man's mastery over the universe.

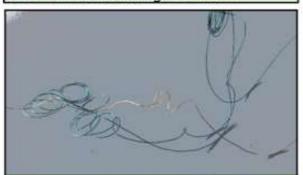


Haraway (2007: 8) considers use of Sidney Harris's humorous vitruvian dog but says that this cartoon should not detract from how serious the nature of multi species encounters can be.



Jim Clifford's dog (Haraway, 2007) challenges us to walk with both nature and culture in de-centering the human.





Craft wire woven together is also a visual-

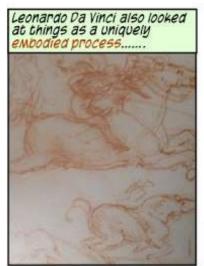
Material way the children depict how they are entangled with Ted and become in their words "a bundle of love" (Billy, Y6).

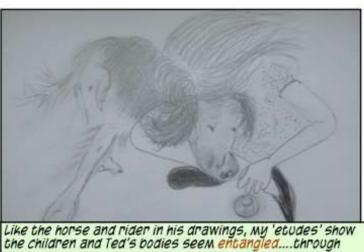


Entanglements are shown through the close intimacy and merging together of human and non-human bodies.











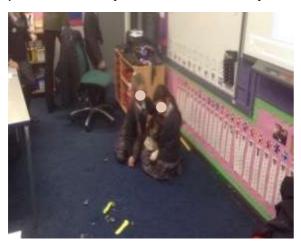


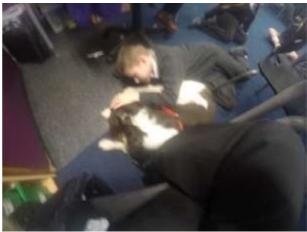
Movement and making lines

As Causey, (2017) asserts, drawing as method opens up such channels of communication in the field although these can be rather 'embarrassing'. I share his own sentiments in that having your drawings and sketches viewed by participants can indeed bring embarrassment, particularly when they are rough sketches that appear doodle-like and far from artistic. No matter, being artistic is not my goal anyway, but to witness, evidence (in a Darwinian fashion), and sensually connect with the experience of interacting with Dave. I am illustrating and drawing-forth a story. I am depicting events in a non-representational way – not interpreting but making meaning. As Causey, (2017) highlights, such a method has recorded important history, cave drawing being a prime example of how culture can be communicated and remembered.

The curious scrutiny of my sketches by the children was surprisingly complimentary, but more importantly was my sense of being accepted by them into the classroom, because of them. I was given small gifts of erasers (even in the shape of a dog), stickers and marbles. The drawings aided conversations about what I wanted to discover from their having a classroom dog, which quickly established my place with them in the process. Not only was drawing a useful methodological tool but is also seemed to partly overcome any power-relations. By this, I mean the fact that I am an adult and by its very nature, this places me in a different position to the children. I was also keen not to be viewed as teaching staff (although the children knew I was a teacher from the university) and be seen as an additional 'authority figure'. However, there were times I 'slip-slided' into differing roles, which was unavoidable. The class teacher, in her very welcoming manner, as we also developed a working relationship, inadvertently placed me in an uneasy position of power at times through her comments 'our visitor must be disappointed in your behaviour being so unruly today' (field note assemblage, Observation No 15). I negotiated this by my appearing to have not heard, bowing my head and carrying on as if absorbed only in my drawings. It provided a welcome solace and retreat.

As well as assisting my memory, my sketches also enabled me to perceive moments differently to have greater understanding of the unfolding experiences. These moments have been described as being 'energised' by Causey, a way to depict and represent the vibrancy which pulses beneath the surface, an 'inner potency' which extends beyond the postmodernism recognition of simple surfaces, (Causey, 2017:111). I like to consider them as moments that data/sketching 'glows' or as 'agentic cuts', as already discussed in this plateau. Corsaro and Rosier, (1992) also hint at similar ideas and refer to these as 'orb webs'- in describing the collective weaving of children in places of socialisation. The vigour and radiance of the moment and the environment is illuminated and manifest through agentic cuts of intimate moments/movements of connection between Ted and the children as shown in photos taken by the children and my etude(s)...





These moments can be said to highlight the affective, felt, sensory nature of experiences with Ted. In addition, they link with the notion of how they can be non-conscious, non-cognised events which are only known through visual-materialisation (photos and etudes). As these are a collective animation, it is important that they are significant renditions of the children's voices, relayed in intuitive imagination. This is a major factor that has not been present in current research into child-human-animal studies.

What is evident is how the children are speaking through these photographs and how they connect with a rhythmic, tactile way of becoming in the classroom when they encounter Ted through stroking, patting and snuggling.



Vannini, refers to these moments as 'a viscous becoming in time-space...that transcends consciousness.... effervescent energy unharnessed and unprogrammed thought', Vannini, (2015:3). What I find intriguing about ethnography is that the 'ethnographers gaze' is fundamental to the research process; however, this ocular vision also has to be translated into verbal or linguistic form. Yet in that very process something of the 'affectico' can be diminished or altered, however, these 'slices of duration' can be harnessed as expansions or restrictions and vectors of affect, (Spinoza, 1985). This is a crucial consideration for any visual research methods, such as this, which seeks to materialise affect, as this is the essence of inquiry. Critically, what this also confirms is that the children's intra-actions with Ted happen on a multilevel (sensory, corporeal, and cognitive). That is, they are not amenable to the children being conversant in the consciousness of the experience; they are affected by it

and *feel* it. The close observation being inscribed and sketched by me is therefore the ultimate means of trying to draw forth and bear witness to the event through etudes and fieldnotes.

Fieldnotes, Blogs and Etudes as Assemblages

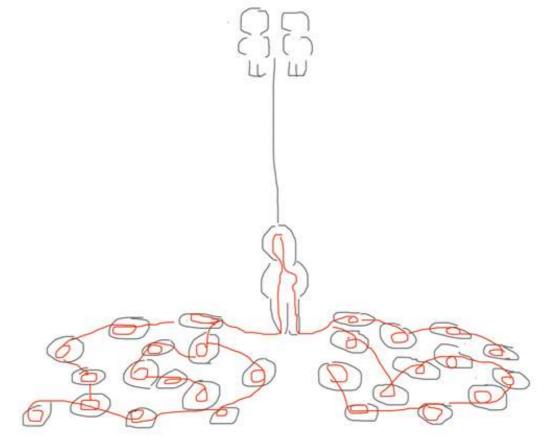
My 'making' and 'producing' data through variants of ethnography are my efforts to radically rethink data as an 'assemblage'. This means it is created of human and non-human objects and rejects conventional analysis which is inherently positivist, (St. Pierre and Jackson, 2014). As it is co-constructed data, it is less ordered and indeed more tangled, jumbled and messy. As Elllingson and Sotorin suggest, this post-positivist proof involves 'pragmatism, compassion and joy', referring to this as a 'data engagement model' (Ellingson and Sotorin, 2020:2 and 8). As such, this ensemble and methodology (data engagement model) engages messiness and multiplicity in artwork, which is nomadic, rhizomatic embodied and material, situated in practice. It is dynamic and animate, involving both myself as ethnographer, the children, class teacher and Ted. I witness, connect with and re-enact the encounters and events, being attuned to the complexities of material co-existing in the classroom. It is a sensuous, creative, risky and fascinating adventure. In a post-human mode, or indeed pre-human mode (attempting to be authentic, unconstrained and free from strata), perhaps becoming a de-territoralisation of the self and ethnographer, as contended by Colebrook, (2015). I am aware of my own vitality and aliveness and attempt to use fieldnotes as rematerializations of my playful engagement with compassion and joy; not fixing the fieldnotes as data but keeping them as active, agential, performative, emergent and affective accounts. They are always in process and always emergent in their creation and re-readings.

Fieldnotes can enable writing which is nomadic and 'encourages lines of flight and flights of fancy', (Ellingson and Sotirin, 2020: 27). Hence, engagement with embodied process can indeed be a joyful and meaningful by-product of fieldnotes. As Vannini also indicates in his comprehensive linguistic triste of writing and mood as non-representational, what remains pivotal to the process is writing *style*, (Vannini, 2015).

As my style of writing is fluid (rhizomatic) and can never be truly non-representational is it through wonder, enchantment and curiosity that I open up the potential of creating, animating and regenerating data as an approximate replication of what occurred in the field. Through observation samples, provocative fragments and agentic cuts, I attempt to illuminate meaning and patterns through being *more-than-representational*.

Rhizomes come with structured disorder, self-organisation without a system. This is very like my fieldnotes. Rhizomatic communication is based on nomadic and intervening links. Hence, the inclusion of multiple variants of ethnography within my methodological framework to enable multiple voices to be heard and appreciated.

The lateral axis of relationships and time slices: Visualising Mitchell's idea of lateral relationships in the following etude and how this mirrors the rhizomatic approach to this thesis, exploring the roots of all connections and yet-to-be-discovered strata (materialsing affect as non-representational).





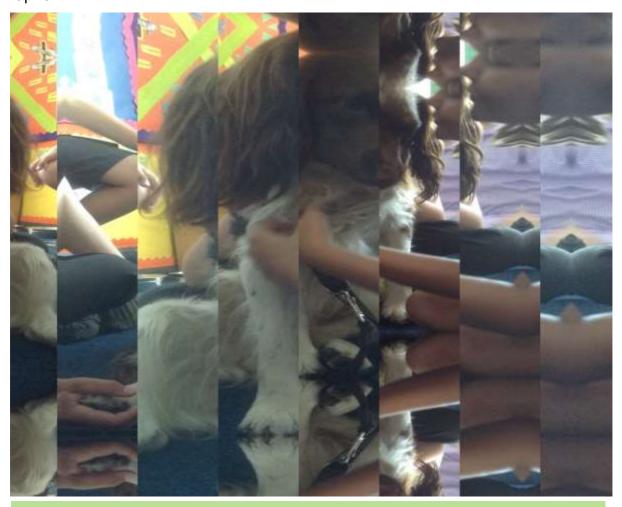
I therefore reinforce further the appropriate and fundamental use of my etudes in exemplifying the anthropologist Ingold, (2016:66) and his seminal work on 'lines' describing how as soon as movement occurs things become 'a line'. As he accurately asserts (Ingold, 2016:1)

'what do walking, weaving, observing, singing, storytelling, drawing and writing have in common? The answer is that they all proceed along lines of one kind or another.'

Ingold also uses the term 'way-faring' to encapsulate the idea of (loco)motion through lines. He asks us to consider this walking-wayfaring as a means to articulate patterns and trails in both human and non-human encounters (as soon as we move, we become a line) or as Klee states 'it goes for a walk', (Klee, 1961:153). This dynamic and material-visualisation helps appreciate how space or place come to matter. The classroom 'landscape' is therefore something that I not only think of as a 'relationscape' (Manning, 2009/2012) or 'sensoryscape' (LeBreton, 2017) but also as a patterned ground, a *meshwork* as it were, of interweaving lines rather than a continuous surface, made by the children, Ted, the teacher and myself during the course of our time together, (Ingold, 2016). This is emblematic of the tuber/rhizome. It is at this point that that there is connectivity between Deleuze and Ingold, as they consider 'lines' or 'roots' as being connectors from one point to another. This gives a true essence of self-growth, proliferation and movement. The 'wayfarer' thus gathers from the environment, drawing a trail and line, as it seeks resources with which to flourish. Gallacher, (2018) also provides an excellent example of wayfaring with her deconstruction of developmental milestones and how the child 'wayfares' through the environment as it wanders and navigates through the home 'landscape', utilising all available resources (Gibson's affordance's) to master the skill of locomotion and walking, (Gibson, 1979).

Whilst considering this I recall vividly an image that captivated me whilst visiting the museum of contemporary art when taking time out from a conference. This image dynamically showed precisely what Ingold and Deleuze were emphasising. It

brought together the seemingly disparate concepts I was drawing from, providing further alignment and methodological synthesis. As the image wonderfully shows, by slowing down or 'cutting' between frames of movement and what Ingold refers to as 'wayfaring', this trail becomes animated and 'alive', (Ingold 2016; 119). Daniel Crooks' images (Static No.12) inspired me to consider these 'time slices' when using visual methods, as affect is materialised and no longer invisible to the human eye. This personifies perhaps the notion of diffraction that Barad advocates, as bodies move (human and non-human) we can be seen to dissolve into abstract from and colour, merging with the landscape and one another (becoming entangled). This was my methodological endeavour within the classroom and as becoming-ethnographer.



Ethnographer time-slicing of photographs to see patterns and rhythms in communication

Static No.12 (seek stillness in movement) 2009-10. Single-channel digital video, colour, sound. 5.28 minutes.

Image source: Crooks, D. (2011) Static No.12 (stillness in motion) 9 April 2011, Courtesy of Daniel Crooks and Anna Schwartz Gallery. Available at: https://youtu.be/sCip5vBIYMo





Nexus point: Creating 'cuts' and time slicing through image. My own 'rhizopoesis' of the same image through re-formatting the picture making further emphasis on motion, movement and the 'life' of lines.



These mesmeric sequences show slow and rhythmic effects of a body slowing down. This made me pause and notice time itself, materially and affectually. This manipulating of splices and fragments of video (or photographs as in this thesis) can enable us to consider and work with time, noticing its space of place. Its tangled relation with non-human entities. Contemplating temporal experience, with that of space and materiality, means I can go back and forth between images in a repetitive motion to

elicit orchestrated moments. These are later emergent as comic panels, with each panel being disrupted and spliced, yet tethering together, creating a time scale and narrative that operates materially and affectually for the reader. A haptic attunement of what might appear ordinary, to attempt to relay moments and ethnographic scenes of emergence. As these provocative images show, they leave impressions and traces, a punctuation as it were. This ultimately brings us closer to some way of knowing the vitality and force of encounter and experience, being affected and affecting one another. In Deleuzo-Guttiarian terms these are events and happenings which challenge current discourses around the 'fixing' of experience, as previously discussed in attachment theory, (Deleuze and Guattari, 1987).

Epistemology, affective methods and planomenons

It is stated that 'methodology must never be separated from epistemology' (St. Pierre, 2014: 3). Barad, (2007) also calls for an onto-epistemology as I have already highlighted in my researcher positioning. This indicates that a research study's epistemology should be consistent with its overarching methodological approach. In view of this, rhizomatic ethnography (this study's approach) is characterised by a similar rhizomatic approach to knowledge formation (its epistemology). Indeed, it can be said that from the outset, data collection methods also inform methodology, in keeping with Barad's, (2007) stance of an onto-epistem-ology, this has invariably been the case.

Ethnography has historically drawn largely on structuralist epistemological approaches. As Sarup, (1993:3) states 'whilst structuralism sees truth as being 'behind' or 'within' a text, 'post-structuralism stresses the interaction of reader and text as a productivity.' Barad (2007) would call this 'performativity' and 're-enactment'. This notion is further espoused by Hague, (2014) in his excellent depiction of comic reading as 'performing', the reader not just as a passive recipient and receiver of information, but engaging in a multi-sensory, whole body, physical experience. There are exemplars of studies, which take a more post-structuralist, critical theory approach that demonstrate a similar process of becoming BwO's. As previously

highlighted Lhussier, (2009) offers alternative ways of representation as being possible using the delightful tale of Pinocchio when discussing the vagaries and vicissitudes of quality of life and long-term conditions. She provides a masterclass in her use of metaphor and of a body in transition and suspension (social) due to 'malfunctioning' and multiple sclerosis – like Pinocchio with wobbly legs and tight strings.

Maggie O'Neill, (2001) also postulates an ethno-mimesis which combines Adorno's mimesis, Benjamin's idea of narrative and Bourdieu's relational aesthetics. This then encompasses a 'walking' ethnographic approach, researcher and informant walking and weaving alongside one another during the research process of discovery, 'situated knowledge' and data collection (Haraway, 2008: 23). Through O'Neill, (2008) I was steered in the direction of exploring the notion of relational aesthetics, where art is a social product which sets up safe spaces to come together and understand each other. What these approaches exemplify is a rhizomatic format that helps me form a thesis-assemblage through the tracing and mapping of my path in the field, the 'plane' itself is an image of thought without being its representation. This rhizomatic format is one, which crosses the line between different types of disciplines, and it can make connections across several modes of being (biological and social domains can be compared and connected through a process model). As Deleuze and Guattari articulate in their verification of anti-Oedipus:

'such is the anti-oedipal strategy: if man is connected to the machines of the universe, if he is in tune with his desires, if he is "anchored", he ceases to worry about the fitness of things, about the behaviour of his fellow-men, about right or wrong and justice and injustice. If his roots are in the current of life he will float on the surface like a lotus and he will blossom and give forth fruit.... the life that's in him will manifest itself in growth, and growth is an endless, eternal process. The process (own emphasis) is everything', (Deleuze and Guattari,1983/2000: 21)

This pluridisciplinary perspective continuously spreads through the mechanism of this thesis- assemblage like overflowing vegetation. As I have discussed in my paper on promoting pluralism in therapeutic practice, we can propagate our thinking across disciplines, operating rhizomatically, in order to address dominant discourses, (Carlyle, 2017). This aligns with Barad's material discursive practice (Barad, 2009). As previously highlighted Ingold, (2016) aptly reminds us, these constellations and invisible threads help us to visualise connectivity.

Walking ethnography also exemplifies my appreciation of affective capacities and movement between bodies (child-canine interactions) bringing into realisation and materialisation the rhythm and musicality of communication; with touch being one aspect of this inter-corporality, (Malloch and Trevarthern, 2009). As Langer, (1953) also asserts, 'when words and music come together in song, music swallows words', (cited by Ingold 2016: 8). There is communication beyond and outside language, it is sonorous according to Deleuze and Guattari...

"Along sonorous, gestural, motor lines that mark the customary path of child and graft themselves onto or begin to bud "lines of drift" with different loops, knots, speeds, movements, gestures and sonorities', (Deleuze and Guattrai, 1987:363).

Without the embodied use of sketching as method of data collection, and indeed recognising my own 'researcher-body', such rich depth of communication and its sonorous, affective forces, intensities and elements would go unnoticed. Text alone would deny the true essence of experience and encounter. Deleuze and Guattari, (1987) remind us that sonorous aspects of being are extremely valid and significant. Thus, the atmospheric nature of these elements can be understood and exemplified. This disparateness (separation from text) can refer to the images or etudes I draw to expose and portray the child-canine encounters. In doing so I disrupt and disturb the flattening of reality, creating a non-representational image of thought (image coming before thought (Deleuze, 1987); as it were a cognitive nonconsciousness and type of sensory or non-verbal narrative, (Hayles, 2017). This is in congruence with affect theory and theorists such as Massumi, (1996), (2002a); Thrift, (2004) and Brennen, (2004) who suggest a focus on affect as an outside stimulation 'somehow hitting first the body and then reaching the cognitive apparatus' (Knudsen and Stage, 2015:4). Haraway highlights the neutral gaze of the researcher and how 'situated knowledge'

(such as participant observation undertaken in this study) is a critical practice for recognising semiotic meanings and providing accounts of a 'real world', (Haraway,1988: 579). She further denotes how we are in conversation with the dimensions of a world, grasping its affective qualities. Therefore, through the research process, one, which is post-positivist, and post-structural the 'situation' can answer back and contribute to this intra-action. Similarly, this resonates with Barad's, (2007: 215) notion of the universe 'kicking back' and Haraway's, (1988: 8) 'God trick' and also expresses a post-human orientation. In 'God trick' Haraway refers to scientific infinite knowledge and wisdom as an illusion about the world. By appreciating and recognising that knowledge is only ever partial and situated, we overcome the 'God trick' position. Thus, the world/universe includes nonhuman subject matter (having agency through enactment) which fields such as science and positivism need to consider, (Barad, 2007).

Affective methods: non-discursive vs material-discursive

A fundamental issue of this thesis-assemblage is the question of affect as being nondiscursive. If we invoke Barad's, (2007) assertions that we must not give language primacy and her quantum mechanics are to be followed, then how do we account and animate affect in research? Discursive practice is that which includes text (discussion, talking) and the non-discursive includes images (movement, gestures, facial expressions). If Hayles, (2017) is to be commended, then her extrapolation of the non-conscious is a master stroke of methodological wizardry in seeking to make the seeming invisible affective encounters visible. This matches well with this thesis-assemblage as it can challenge from both an ontological (nature of reality) and epistemological (nature, and acquisition of knowledge of reality) positioning of how human and non-human relations can be re-configured with and beyond the realms of language and text. Barad's idea of the 'material-discursive' adds further traction to this exposition as it enables the re-enactment of child-dog intra-actions and encounters, thus opening up different ways of seeing and 'patterning' of relations to manifest and come into creation (hence my own use of my neologism 'rhizopoesis' and materialisation of affect through this paradigm) in seeking deeper understanding of complex relations, particularly that of human and non-human relations and entanglements. It

gives sufficient credence to the corporeal, atmospheric and rhythmic processes at play during these encounters. The intensities, energies, of bodies and their affects can be accentuated through art and walking. It attempts to overcome the issues of human exceptionalism, accounting for the 'material communication' of Ted, his eye contact, bodily movements, and vocalisations are given status (agency) to reveal the intimacies in his encounters and the subtle nuances of intra-actions that go unnoticed and unsaid. Barad's (2007) contribution to this *process* and thesis-assemblage lies in her materialistic philosophy which considers materiality as *agentive* and thus, not being detached from the surrounding nature and discourse. They are entangled as shown through her hyphenated use of the term material discursive. Entanglement and intra-actions can then enable the magnification of our non-human surroundings or relations (based on quantum understanding) of how we are entangled (with 'objects', 'things', 'matter') and how this is always *relational*.

Ways of materialising embodied encounters

Deleuze's perception of vitalism and affect theory enables us to apprehend a morethan-human and post-human world. He enables a way of seeing the world which accounts for what can go unseen- the affective intensities of experiences which are often *felt* and sensed, yet can go uncognitised, (Hayles, 2013) and therefore unknown. Through affective methods and by drawing upon our visceral, corporeal and embodied experiences we can endeavour to reveal these important aspects of human and non-human well-being and flourishing. Interestingly, neuro-imagery and neurological flux is not well established in neuroscience research because these images are 'snapshots of a certain moment of physical materiality' which thus, escapes capture as they are more than fixed points in time, (Schmitz and Hoppner, 2014: 5). In static form, they do not reflect movement and change and can therefore be viewed as neuro-reductionist. Although a technological advancement, neuro-images and scans do not allow for the processes and mechanisms of experience to be fully understood and in this sense, experience is 'flattened'. As physicist Barad describes, visually animating and enacting scenes of entangled child-dog relationships can illuminate a mapping of experience which she refers to as 're-configuring space-time-and matter' (Barad, 2007:179). Through this 'unflattening' of experience and synthesis of both

art and science, we can reveal the dynamic and vibrant relationship between Ted the dog and the Year 6 children.

Through illustration of Deleuzo-Guattarian concepts such as the rhizome (through pendulum painting for example) the children develop their affective and visual vocabulary, or visual narrative, (LeBreton, 2017). This botanical metaphor described by Deleuze and Guattari, (1987/2013) can be used creatively in research through Deleuzian action as a data collecting method which allows for the children's consideration of autonomous, unrestricted movement and rhythm. As the rhizome (an underground stem and root system) stretches and freely expands (lines of flight) so too can the children's expression of their experience with Ted in the spaces and places shared within the classroom. These then become 'plateaus' - points of reflection where meaning making is reached and crystallised. These plateaus are visual and textual. They merge and mingle. Rather than thinking of language in itself Deleuze and Guattari helps us see in pictures and "images of thought" (Deleuze and Guattari, 1987/2013: 16).

An orientation to nature: 'life force' and vitalism

This connects to the idea I put forward of children as 'vectors of entanglements' (Carlyle, 2017) in that children are not just in the world, they are in process and part of it, having an energy and 'jizz' which affect it through their vitalist engagement with multiple entities both human and non-human, (Lorimer, 2007: 917). So, what is 'jizz'? As Lorimer suggests, it is an organism's aural characteristics and connection with its daily (ethological) dwelling, rhythm and movement in the world. He draws similarity with Deleuze's (1994) term 'singularity'.

I prefer to consider energy, 'life force' and 'jizz' rather than non-human charisma in itself, as Lorimer argues most astutely how charisma *alone* is not the only appealing aspect within species, giving the example of how a slug can be equally as 'charismatic' through its 'jizz' and silvery trail (lines) of movement left behind. Slugs are rarely considered cute or having charisma but through emphasising the idea of en-

ergy, force and intensities we can engage not with disgust (as might be the usual reaction to a slimy slug and its trail) but to view all things as entangled and connected whether they have aesthetic appeal or not. This indicates something analogous to Dreisch's teleology and 'prospective potency' of animals or organisms., (Dreisch, 2010). Such properties can be a conduit to the visceral, corporeal and embodied aspects of relating. In alignment with Barad, (2007) and Deleuze and Guattari, (1987/2013), Lorimer suggests charisma first 'emanates from the body' and sketches a vital (new) materialist ontology that is relational, (Lorimer, 2007:927).

The aesthetics of cuteness or charisma has been previously highlighted in my discussion on the aesthetics of cuteness through Lorenz and his theory of 'childschema', (Lorenz, 1943 cited by Dale, et al, 2017:3). Without doubt this is still relevant, but we must encapsulate more Deleuze's idea of 'multiplicity' when attempting to de-construct dominant and prevailing discourse which do not fully account for all of human, as well as non-human experience. This further aligns with my own thoughts of 'anthropomorphism' (human behaviour and acts that we evaluate nonhumans through) as being mis-guided. However, the implications in terms of children's material cultures has taken this amalgam of a species into new and complex cultural practices, therefore highlighting a greater need in understanding the mechanisms and mechanics of human and non-human relationships. Lorimer, (2007) provides an intriguing and tantalising contribution (through children's and animal's geographies) to bring forth the relevance of an affective and vital motivating force, which both compels and propels relational intra-actions. The idea that living things have 'vitalistic causality' are affirmed effectively by Lee, (2012) through the example of children's 'naïve biology'. Lee (2012) postulates that the forces of human society, culture and history greatly determine how children grow and develop. In a similar argument Malone (2016) reflects how this imbalance can be resorted through a post-humanist and new materialist approach to research and the disruption of universalism in current 'child in nature' debates. In addition, Taylor emphasises the 'entanglement of human and more-than-human relations' as being an important exposition, (Taylor, 2013: 118). In parallel with Barad (2007), Deleuze, encapsulates this further through his acknowledgement of an onto-epistemology:

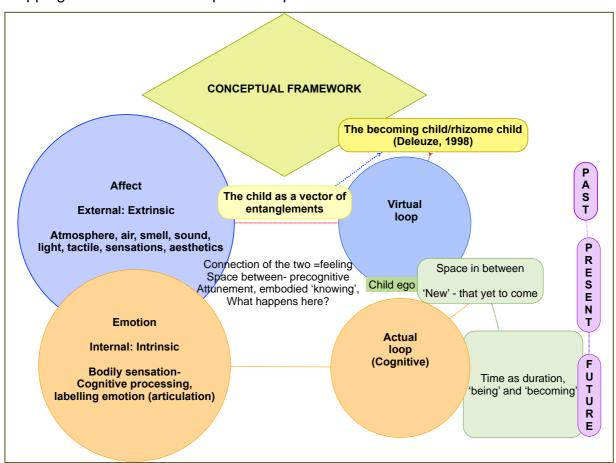
'Small children.... are infused with an immanent life that is pure power, even bliss...to the degree that they constitute the elements of a transcendental field (individual life, on the other hand, remains inseparable from empirical determinations') (Deleuze, 2001:30).

These movements of entanglement matter as they can change atmosphere through transmission of heat, sound and kinetics. These are embodied processes and material-discursive conjuring's which are important to validate and acknowledge, in order to strengthen the 'affective turn' to understanding nature-culture entanglements. In Deleuzian terms this can be considered our 'collective consciousness', a way in which we are all entangled with one another through 'cosmosology' (Deleuze and Guattari, 1987/2013: 398). Aristotle considers eudaimonism as key to human flourishing and we must incorporate that flourishing in all of its vicissitudes, is dependent upon our multi-species and non-human encounters and relationships in the world. It is at this juxtaposition in which I share a mutual appreciation of affect and vitality in social relations as seen in clinical practice and through the wonderful writings of Daniel Stern and his 'Forms of Vitality'. Stern takes vitality to describe 'felt experiences of force' that are sensations involved in 'being alive', (Stern 2010: 8). He provides efficacy to movement and sensation distinct from the domains of emotion and cognition. This gives rise to the idea of 'affect attunement' where people (and I would argue animals also) match and mirror the same dynamic form of movement and behaviour – as Stern puts it, the same crescendo and decrescendo. Hence, the shared spaces in the classroom between Ted and the children can reveal a vitality patterning and affect attunement within the environment as atmo/sphere. I move forward with this significance in the next plateau, Plateau # 3 Opus and Fugue.

Meeting Barad in alignment (half-way) with Deleuze and Guattari

Furthermore, the boundary between that of the 'subject-object' binary can be collapsed, in true Deleuzian fashion, and through thinking with Barad's agential realism. By reading their insights through one another in a diffractive manner, we are seeing the subject as a unit or system. The ontological shift amplifies significantly how a

shift of power-dynamic can allow for greater application and appreciation of Barad's and Bohr's quantum mechanics to reconcile methodological differences, although their work can sometimes be difficult to apprehend and decipher. Bondi, (1999) also calls for such a shift in paradigm, linking specifically with disciplines such as psychotherapy and developmental psychology, to help understand complex relational processes. As children's growth and development entail cross-disciplinary perspectives (nature and nurture) the idea of integration and pluralism in practice is something I have argued for in therapeutic work with children and young people in my paper (see page 89) 'Promoting Pluralism in Counselling Practice: An Untapped Source of Relational Mapping as Therapeutic Process', (Carlyle, 2017). It is in this paper that I further expand on and attempt to explain what I mean by my conceptual framework and 'children as vectors of entanglements' (see conceptual framework diagram below) by offering a visual-textual form to relational process through a diagramming and mapping of relations across space and place.



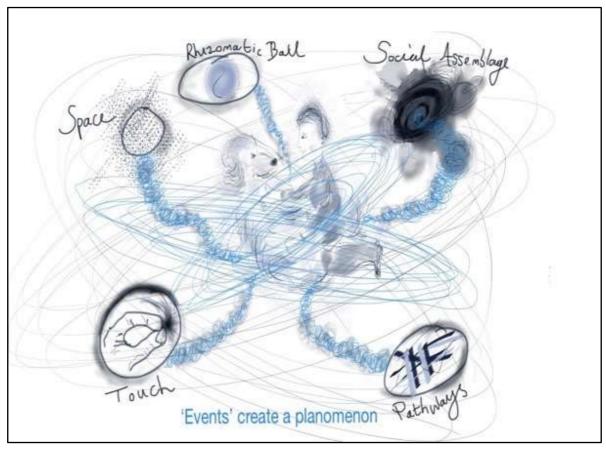
Deleuze describes the child's body as a vector of affect, a generative force, an activator of change. As an abject state, which depends heavily on external causes, its material elements will vary according to its connections, relations, movements and individuated assemblages it enters (relations of production).

I attempt to create a (rhizo)poesis of lines suggested by Ingold (2016) to accentuate what LeBreton calls a 'visual vocabulary' to support and materialise affect, (LeBreton, 2006/2020: 33). In doing so, the non-human elements and entanglements of experiences can come to a place of greater fruition. I am reminded of the very similar and very apt quote by Winnicott 'there is no such thing as a baby', (Winnicott, 1975: 145). His object-relations perspective is perceptive, insightful and his famously delightful quote also demonstrates an allegiance with the idea that we do not have 'identity' or 'personhood' or invariably 'agency' unless we intra-act and become-with another. One of Winnicott's most enduring examples of work, and one which I exemplify as monumental in regard to visual-material methodologies and practices is in his therapeutic engagement with children (beyond words) through his use of the 'Squiggle' game, (Winnicott, 1971/2005). Despret, (2012) also helps us consider this issue in how we can reconfigure our relationships through her provocative proposition 'what would animals say if we asked the right questions'? Clearly 'languagism' is an issue to overcome when thinking with and about human-animal relations, and current discourse (within the field of human-animal studies) is insufficient in taking account of this fundamental 'sensology' as an essential aspect of experience, (LeBreton, 2006/2020). Dogs do indeed have a language and 'languagism' which is unfurled through their capacity to use their body, vocalisations and encounter words as spaces, (Latimer and Gomez, 2019). Dogs encounter words and spaces with humans, and this re-configuration of what constitutes language helps us re-distribute power creatively, viewing their experiences in animal studies as an exchange of embodied affective and shared situations.

Barad and Deleuze may not be poles apart in explaining the vicissitudes of the 'subject' as one might think – both their use of neologisms hinders the common referential points in which they merge. As previously highlighted, the 'becoming-with' which

Deleuze postulates and the idea of 'intra-action' which Barad describes constitute similar ideas of how we engage with the world around us, the mutual benefit from our coming-together to create 'something more', although this is contested, in scientific terms, what I now endorse is an *alignment* of the two philosophical positions. This is an expansive process and continues through to Plateau #3 – where new patterns and re-configuration emerge and are visually animated.

Etude to depict alignment of concepts through intimate and affective events and encounters.



This also confers with Butler's ideas of performativity, the re-enacting of child-dog intra-actions produce a different kind of performativity, (Butler, 1990/2007). Personhood and identity are inherently connected to this, and parts of the child may be projected into their classroom dog as they too are contesting the challenges of daily life and the tension between power and resistance as played out through boundaries and regulated spaces. This could also be the case for Ted as both his and the children's internal states act in a bi-directional nature.

This is beyond anthropomorphism and is something much more. Although this research is concerned with the affective components of the relationship (outside of psychoanalytical constructs), these dynamics and vitality affects need to be acknowledged as they shift thinking away from a pure anthropomorphic understanding of child-human-dog experiences, (Stern, 2010).

The child and dog meet as subjects- co-being and becoming together (as orchid and wasp), children feeling part of the dog, moments of mutuality, being in synch, rhythmic harmonisations and practices, through the unfolding of non-verbal and verbal narratives. This is a co-constitution and co-being which has also been described in human-horse relationships by Maurstrad, Davis and Cowles, 2013. says this appreciation of shifting power-dynamics and meeting as subjects is lacking in human-animal studies. Thus, this thesis through its ethnographic and multi-modal approaches ensemble attempts to understand this intimate and complex relationship. In affectively attuning to the complexity of the child-dog relationship paying attention to the classroom sounds, rhythms, and atmosphere, is considered 'ethical' and 'intimate' work that can provide an alternative shift from current typology of the child-dog assemblage where anthropomorphism, like attachment theory can be a limited lens (Latimer and Gomez, 2019: 67). Alongside this I began to see how Dave became an intimate and embodied part, or even 'prosthesis' of both myself, the children and class teacher, (Michalko, 1999). This becoming-with/ness, or 'dance of agency' changed the atmosphere of the classroom, (cf. Pickering, 1995). It became a 'spatially extended quality of feeling', (Bohme, 2017:15) meaning it produced space whereby the child-Dave assemblage became an atmospheric sensor and transducer which transformed and disrupted the classroom space, and in turn enabled a degree of political contesting of the very notions of control and regulation (territoralisation to deterritoralisation in Deleuzo-Guattarian terms). Ramirez-i-Olle's ethnographic study has clearly highlighted that intimate entanglements such as friendships can become sites of tension and also be a means to 'curiosity-driven' care and flourishing, (Ramirez-i-Olle, 2019).

I now show how the children's intimate entanglements with Ted and myself afforded many of the aforementioned nexus points, generating revelatory data and a multiplicity of becoming's.

Plateau # 3 Opus and Fugue Prelude

What is Rhythm-analysis?

In keeping with affect theory and Deleuzian philosophy of sensations Lefebvre offers a very conducive framework for data analysis – rhythmanalysis, (Lefebvre, 2004). This method of data analysis emerged alongside the process of ethnographic observation and through witnessing it regularly through the child-dog assemblages and moving bodies. This was through rocking movements, varied hand stroking techniques and what I call a 'rhizomatic ball' game. I describe these in further detail within this planomenon. Rythmanalysis has been considered both a method and data analysis tool, however, its theoretical foundations are argued to be somewhat scientifically unexplored (Lyon, 2019; Chen, 2018). However, I suggest Lefebvre's seemingly fluid and open-ended approach for 'rhythmanalysis', is a real strength which means that it can move across multiple disciplines melodically. It's very strength in post-structuralist perspective accentuates how its very nature resists fixation and codification as it exemplifies flows and intensities, crescendos and decrescendos, temporality (duration), movement and kinetics. This strength can then exemplify plurality, non-representation and a non-reductive analysis of sensory and affective data. It is a flexible and creative working tool with which to observe the finer nuances of relations and social interactions, those which unfold as cyclical rhythms. For a 'walking' ethnography it is an ideal way with which to uncover the social practices (within the classroom) and embodied experiences, using the body as a site and tool, as a 'metronome' to learn from it as a 'rhythmanalyst' exploring both the internal and external lived senses and temporalities, (Lefebvre, 2004).

In my application of rhythmanalysis I used three phase events in parallel with my **three phase** events of the produced planomenons within the data. These three phases are: -

- arrhythmias breaks in synchrony,
- **II.** polyrhythmias -collections of rhythms in synchrony
- **iii.** eurhythmias -harmony

These rhythmic phases help me to describe the influence of space and time (duration) on activities and learning in the classroom. They offer a strong framework with which to answer my research questions. Arrythmia can be considered a lack of synchrony and attunement. Importantly this can be said to 'limit one's sense of agency', leading to feelings of alienation, (Alhadeff-Jones, 2019). Polyrhythmia describes environments which contain heterogenous rhythms at the same time but can remain disconnected from each other. The classroom was very much a cauldron of polyrythmia, made of sound, behaviour and movement, (human and non-human). Alhadeff-Jones argues that these evolving heterogenous rhythms can be connected through images, narratives or activities that provide the children with a sense of connection and coherence, (Alhadeff-Jones, 2019). I therefore suggest that Ted afforded transformative connections to enable a shift from ployrhythmia to eurhythmia (harmony and synchrony) through touch, movements and sound behaviours such as stroking, walking, rocking, tapping, hugging, humming, giggling, snoring (Ted's snoring when he slept). In terms of eurhythmic, specific social phenomena emerged in the form of small group dynamic and assemblages. These small group assemblages developed a shared synchrony, a line of flight and breaking off from the polyrhythmia or arrythmia and produced their own space and time that seemed to amplify an enhanced intimacy. This was observed on several occasions when the children, whilst stroking Ted, can be seen to intimately touch one another's fingers and hands in what seems a deliberate action of mutual liking. I discuss and reveal these noteworthy moments during my close observations further in Plateau #4 'Rhapsody and Refrain'.

Eurythmic assemblages

Moments of harmony (eurhythmia) occurred when the children disrupt (bringing about the pedagogic arrythmia of the teacher) the ordered space and time of the lesson. In here lies the tale of many rhythms, Ted's, the children's and my own. These contrasting tensions and orchestrations of rhythm can be *both* territorialising and deterritorialising. So, in that sense we all produce both as we are in a constant state of flow and flux of de-territorialisation and re-territorialisation. When agentic cuts transpire this further change the rhythmic cycles in which Ted affords the children a de-

terrorisation as he diffracts and changes the space and time as an 'assemblage converter' (Buchanan, 2014). Invariably it can be deduced that the classroom goes through polyrhythmia, arrythmia and eurythmia in repeated and random patterns of relating. This is similar to what Malloch and Trevarethern aptly term 'the musicality of communication', (Malloch and Trevarthern, 2009) and Stern the 'dance of reciprocity', (Stern, 1998). I suggest that similar patterns or rhythms of relating occur between human and non-human things. Clearly Ted relates to the sounds and therefore rhythms of the classroom taking in the tone, timbre and intonation of speech. He also attunes to gestures, movements and behaviours. He produces what I call a 'hands on pedagogy', meaning that the smooth (unregulated) space he affords the children (and on occasion the class teacher) through the very process and mechanism of petting and touching, enacts a musicality and rhythm that regulates (sensory) states, creating synchrony and focus. This may in turn be linked to **both** hypo and hyper arousal affective states. For example, depending on the children's individual sensory processing profiles, the children who are hypo-aroused can reach an alert level through tactile stimulus (of Ted's body and fur) and children who are hyperaroused can also reach a more composed alert level through the very same stimulus. This tactile aspect of social connection powerfully facilitates the capacity for learning.

Plateau # 3 Opus & Fugue

PART A: Sense-Data Collection & Rhythmanalysis

"Everywhere where there is interaction between a place, a time, and an expenditure of energy, there is rhythm" (Henry Lefebvre, 2004: 32).

Opus (producing protocol/a piece of music or collection of pieces, written by a particular composer)

Fugue (Comic/Music that repeats a simple tune which develops into a complex pattern using different instruments and voices)

THREE PHASE EVENTS:

- I. The moment (event) and enactment
- II. The 'etudes' and animation
- III. The reading

Planomenon 1 - pendulum painting (movement)

Planomenon 2 - craft work (space)

Planomenon 3 - comic (BwO)

Planomenon 4 - mini zine's (space and place)

Planomenon 5 - researcher body (multiplicity)

Planomenon 6 - what a dog's body can do

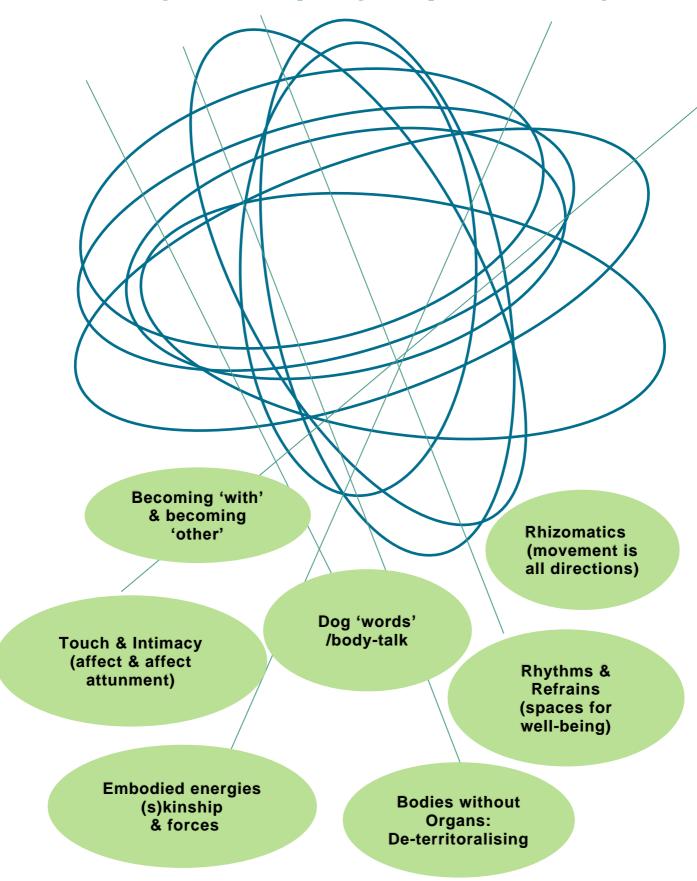
This plateau was emergent in part from a conference paper and publication in medical humanities and a publication in a journal which exemplifies multi-modal ethnography. Data was collected and emergent in what I call three phase events, presented as six PLANOMENONS: -

- 1. pendulum painting (movement)
- 2. craft work (space)
- 3. comic (BwO)
- 4. mini zine's (space and place)
- 5. researcher body (multiplicity)
- 6. what a dog's body can do

These data producing workshops I call *planomenons* as this term suitably refers to how 'assemblages fit together the variables of a stratum as a function of its unity, they also bring about a specific effectuation of the abstract machine as it exists outside the strata', (Deleuze and Guattari, 1987/2013: 84). They intersect with the plane of consistency 'they rotate in all directions, like beacons (Deleuze and Guattari 1987/2013: 84). Thus, they can be considered de-territoralisations (producing new spaces) of abstract machines form the strata. They are rhythmic openings and emergings which create vectors of knowledge and new insights. They not only emerged in the classroom but also as part of being a 'rhythmanalyst', paying attention to my body, calling on all of my senses. It can also encompass a verbal act and be poetic. This unfolded during my analysis of fid notes and etudes, (please see **Planomenon 5**). Thus, creating a...

'portrait, a copy, a double, a facsimile...the act of rhythmanalysis *transforms* everything into presences.... the act of rhythmanalysis integrates these things – this wall, this table, these trees in a dramatic becoming, in an ensemble full of meaning' (Lefebvre, 2004: 40).

'Diffractive' alignment (of concepts) diagram: A planomenon of findings



Workshops

Planomenon # 1 Movement: Pendulum painting

The first workshop is suggested to the children as a way to explore how they moved around with Ted in the classroom together. Using pendulum painting it was hoped that the motion of the pendulum (cup and string attached to the authors large camera tripod) swinging back and forth, would enact and provoke a visual vocabulary (narrative) of how the children's movements with Ted could visually materialise how they moved in the shared classroom space. Through these rhythmic movements (paint-pendulum) they explore and map the corporal, affectual and visceral embodied process.

This idea and materialisation of affective and 'wayfaring' process is re-enacted in the first workshop with the children, depicted in the following etudes (emerging into Planomenon #1), which bring to life the children's notion of 'pathways' and movements through pendulum painting and other craft work mediums.

Planomenon #1: The children materialising the 'life of lines' which depict Ted's rhizomatic movement within the classroom through pendulum painting and craft materials.













These culminated in emergent ideas from the children about our bodies and gravity (curiously their use of creativity and art connecting with science). The use of words 'wild' and 'butterfly' by the children materialise the visual patterns in an important embodied process – a merging of image and text. These artwork activities are not 'capturing' or reducing the children's experiences but clearly depicting how there are multiple subjectivities and multiple truths. They continually move and change and hence are non-representational; a focus on practices and embodied experiences, prior to conscious thought, (Anderson and Harrison, 2016). Like expansion of space these movements can be considered as globes, bubbles or 'rhizospheres' (Deleuze and Guattari, 1987: 278) where the child-dog relationship is mutually co-productive in terms of increased agency and spatiality. These vectors of intensity have potentiality and motion. Within these spaces new ways of interacting are emergent. The attunment, rhythm and tone (or musicality), of their moving bodies afford close physical contact, (Malloch and Trevarthern, 2009). The moments of intricate and intimate touching and stroking occurring in a 'smooth' space (unregulated) which is safe and part of the classroom (sub) culture. The classroom also becomes a 'sensoryscape' of relational encounters and events, (Lebreton, 2017). These assemblages of well-being are ones in which affective sensitivities collide through relational dominions which are embodied and transforming. The following extract from field note assemblages highlights this dynamically and wonderfully in the teacher's reflections and comments:

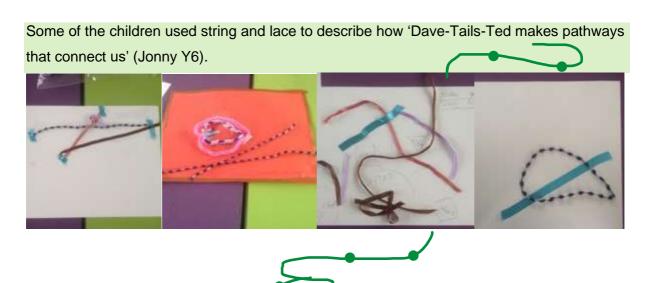
Extract from field note assemblage 11/07/2017 (Observation 10):

"Because of Ted I have become a very popular teacher; I stroke and hug the children, just like I do with Ted. I stroked Billy's head last week when he was crying and upset, it's like I am an extension of Ted and he's helped me feel able to comfort them through touch or a hug, when this is often not seen as 'politically correct".

Deleuzian attention to creative processes, as well as being deconstructive, allows for the consideration of the affective dimensions of the classroom atmosphere and environment, given its relevance to fruitful learning.

Planomenon # 2 Space(s): Craftwork

Workshop 2 entailed the children selecting whichever medium they wished to show their favourite places and spaces they shared with Ted in the classroom. Materials such as fuzzy felt, feathers, cotton, string, lace, craft wire, buttons, pegs, straws, tissue paper, cloth, sandpaper etc. were made available.



Ted would initiate many of these pathways through what I call his 'rhizo-matic' ball game, in which he would roll his ball back and forth between the children. This had a notable element of communication, with some of the children whose first language was not English, using this game to engage with other children and connect with

them in a non-verbal manner. It was almost as if Ted enabled 'ghostly lines' to manifest in the classroom (Ingold, 2016: 50) and create what Winnicott calls a 'third space', 'in-between', 'transitional space' of communication, (Winnicott 1975:16).

Sitting on the classroom carpet became a point of reflection in the children's pictures, a space where they would regularly sit and join Ted, either during lessons or outside lesson time. This space enabled feelings of playfulness, a becoming-with, a becoming-together of Ted and the children. As Deleuze and Guattrai (1987) purport, these movements, flows and affects are relative to mutual well-being and feelings of self-control. Ted then affords movement, freedom, control, motivation, enthusiasm, participation and more choices, as denoted by Ryan and Deci, (2000) as important attributes which enhance well-being and self-determination.

Some of the children used craft wire which was shaped into 'bundles' and described by them as 'bundles of love', (Amapal, Y6),(curiously emblematic of a tuber/root system) or Ted and child/children entwined together....

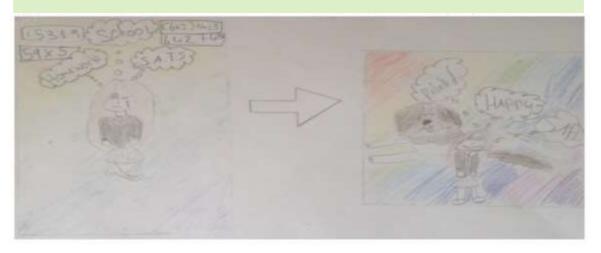




Several of the children decided to use other mediums and draw or sketch with pencil or crayon. Jenny drew two pictures alongside one another, one in which the land-scape looks sad and gloomy, then the other which is happy and colourful (when Ted is in the space). Some of her classmates referred to this as a 'comic strip' and a

couple of boys fetched their marvel comic books from their drawers to share with me. They then collectively decided that a comic book would be a good idea through which they could tell their story of being with Ted in the classroom. The third planomenon was then emergent as a 'rhizo-comic'.

Jenny's 'comic strip' as an emergent process: when Dave-Tails-Ted is shown in the panel the rainbow is more vibrant and colourful, changing a state of crying (worrying about maths) to becoming 'relaxed', 'happy' and 'safe'



Planomenon # 3 Being and (be)coming together a Body without Organs: Photo assemblage and emergent children's comic

A further expanding of Ingold's concept of 'ghostly' lines aided visualisation and materialisation of the invisible or hard to see traces and patterns of motion and movement. As he states, 'it is if we had stretched a taut string between points, or traced an arc overland between them, as indeed was done in the earliest practical attempts to measure the earth', (Ingold, 2016: 50). He provides an image of the northern celestial hemisphere constellations as an example. What his concept enables is a materialisation of seemingly abstract, even esoteric, entities, allowing a visualisation that animates and unflattens movements and events.

I have used Ingold's notion of 'ghostly lines' to help me consider how the children's photographs are pixilated in their comic creation and that the very process of this in itself is making a diffractive image- in effect the assemblage of dots creating a 'ghostly line'. This pixilation through using space and distance made between the

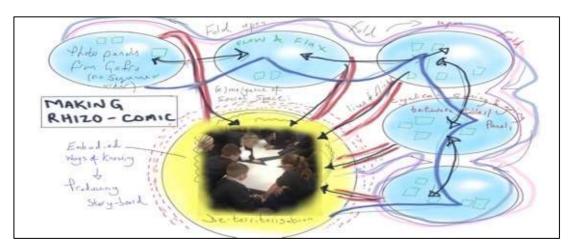
dots, breaking the image up into multiple dots can be thought of as tiny points of connectivity- cutting-apart-together, (Barad, 2007). When a dot makes contact (comes back together) with another dot it seems to merge and burst making bigger dots and so on. Such a connection can produce incredible affects visually and indicate a measure of light and dark, and a joining and merging of bodies (as I have often seen with the child-dog encounter, and indeed *felt* as an ethnographer-pupil). This analogy resembles Sloterdijk's (2011) inimitable work regarding bubbles and foam. It is one that I have contemplated in relation to the umwelt of experiences in species (von Uxekull, 1992). Here, once more, we have alignment between concepts, with both Deleuze and Sloterdijk raising the importance of bubbles and spheres, with Deleuze's philosophy aligning with the philosophy of Sloterdijk's and existentialism.

The third workshop was introduced through the idea the children had of making a comic to tell their story about when they came together with Ted.



Photographic 'de-territorialised' assemblage emergent as a children's comic

Ethnographer's etude of workshop process



The children accumulated over 300 photographs they had taken of which 50 were selected by them for the workshop and consequent third planomenon 'being and (be)coming together, a BwO's. The 50 photographs were assigned to five table-top assemblages. The children, with Ted alongside them, then laid them out in panels on a large piece of paper, in any sequence or order they wished. They then added speech and thought bubbles as well as shapes, colour and captions to tell their comic story. Once all the photographs were collated, the pages were brought together, unprompted, by the children 'rhizo-matically' (non-linear, non-hierarchical, dis-organised) culminating in the completed comic. The children also voted to rename Ted as "Tails" and agreed the title "The Terrific Tale of Tails! An amazing **School Dog**" for the emergent comic. This 'othering' of Ted being re-named as 'Tails' further exemplifies how he was given an alternate role and de-territorialised (liberated from the structure and order of the classroom system). In doing so, the children could also be viewed as becoming de-territorialised themselves, freeing them up from being 'pupils', to becoming creative storytellers and nomadic explorers. This material-semiotic process illuminated the children's affective encounters with Ted, making visible the invisible (the transmission of affect), non-conscious, unthought, sensory elements which are grounded in Deleuzian actions and concepts. This enabled a two-dimensional 'unflattening' of the experience to see and view the surface below the experience which is 'teeming with possibilities' (Sousanis, 2015: 16).

The photographs taken by the children in the classroom with Dave have been 'digitalised' and 'pixilated' through the process of storytelling and 'rhizo-comic' creation. The children are using the materiality and semiology of experience as a tool to reveal their narrative. In order to explicate the rationale for cutting apart and cutting back together (diffracting) the repetition of events, as seen through etudes and 'snap shots' of photographs respectively, the central issue of agency arises as a key aspect. Spinoza and Deleuze refer to agency as affect and the children's agency (affect), which seems enhanced during the photo taking, affords them (through Dave) a different way of being, a different way of seeing, and a space for 'becoming'. It is in a similar vein to Abramson et al, (2017:2) and their notion of 'ethnoarray' (sensory/heat maps as allagmatic function) that I am using the photographs as ethnographic data. However, these are *intertwined* with text as opposed to being *beyond* text. This 'ethnoarray' takes the genre of a comic. As Duneier, (2011) argues it provides a necessary and critical alternative to 'positivist' social science. By reading comics, and indeed this paper/plateau 'diffractively' (Haraway, 1987; Barad 2007), (a wave-like back and forth, eye-motion) the reader is part of a **double-becoming** with the narrative



Plateau # 3 Opus and Fugue

PART B

Enacting scenes of entanglement through a 'rhizomorhic' comic

(Body-without-Organs)



Enacting scenes of entanglement through a 'rhizomorphic' comic (BwO) Comic page 1





Inside: an Amazing Story of Our School Dog!















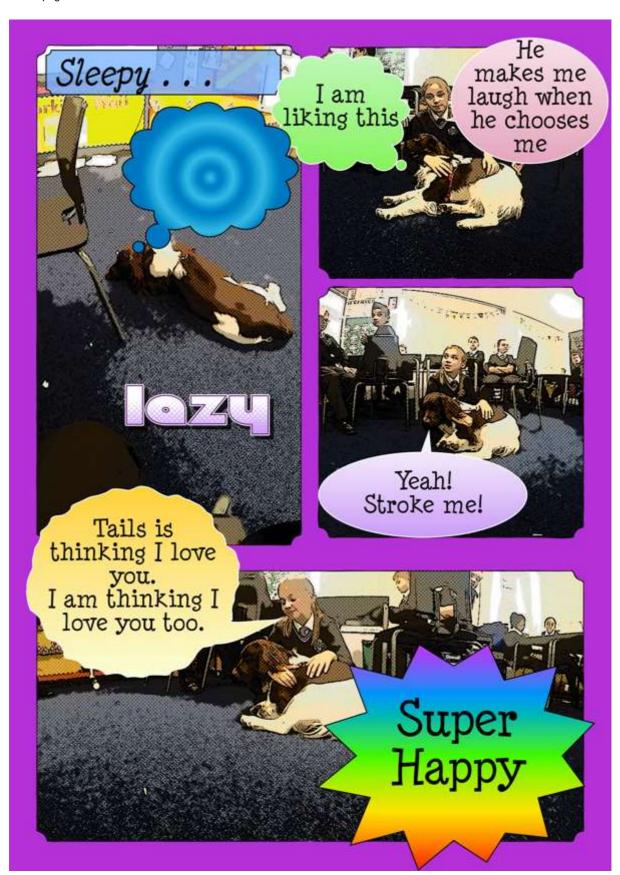














Plateau # 3 Opus & Fugue

PART C: The Children and Tails becoming a Body-without-Organs (BwO)

One of Deleuze and Guattari's, (1987) lexicons is the concept of a Body-without-Organs, (BwO). This inimitable idea offers a way of seeing how relationships can become subject to societal structures of organisation. It is a surface (philosophically), not a physical body, where social energies interact. Far from it conjuring up any idea of an 'embryonic' state, it is emblematic of the need for agency and autonomy to be acknowledged in childhood, (and animalhood for that matter); thus, challenging the 'striations of space by the State' and social construction of children in particular, as requiring control and regulation, (Luhssier, 2009:45). It provides a way in which to experiment and enact experiences in the world and how they are constantly being re-written and changing. Hence, Deleuze and Guattrai's BwO being in opposition to the 'territorialisation' and de-liberation of the body. Our ethics of care towards children and animals means by 'becoming-together' in multispecies relations and entanglements we must re-configure non-human relationships and give their significance greater attention.

Through such rhizo-matic thinking, we can become-well-together and flourish along-side one another. The children's and Ted's rhizo-comic shows such a dynamic and exemplifies the rhythms of affect which ultimately expand our understanding of the significance of animal-human relationships. This co-creation between the children and Ted reveals a distinct relationship in which spaces are shared equally and disrupted dynamically from being territorialised to becoming de-territorialised. As we can see in the pictures/panels the children and Ted share 'common worlds'- where they both co-exist in the classroom together and enjoy an egalitarian relationship on the same level quite literally (becoming an assemblage sitting on the floor together, and Ted's body sharing chairs and tables, (Taylor and Pacini-Ketchabaw, 2015), (see comic panels/pages 1 and 13).

As Donna Haraway states 'learning how to flourish together in difference' (Haraway, 2008:301) being exemplified. This difference is a non-human difference with Ted enabling a non-human relationship that is fundamentally sensorial in nature (tactile, visual, olfactory, and auditory) and potentially equal. Through his material, unboundaried body Ted avails himself for touch. Detailed observations and etudes revealed that these touches were carried out in varying, intricate ways, either patting, stroking or massaging the contours of his body. His ears and face were regularly stroked rhythmically, much to Ted's delight! Eye contact was also a noteworthy feature of interactions where Ted and the children mutually gazed at one another for sustained moments during physical contact. This interesting aspect of their close relatedness through Ted allowing them safe permission to touch, clearly showed a mutual sense of connectedness, which is essential not only to the children's enhancement of sensory and perceptual awareness but also of their shared sense of well-being and flourishing.

Closely observed hand movements, animated through the researcher's etudes, on Ted's body showed varying ways in which the children used his body and fur in a rhymical and regulatory way. Children's fingers and hands would circle, flick, sweep, scratch, tap, ruffle and flounce Ted's body fur, limbs, muzzle or ears. This orchestration of movement resembled what the author considered to be like 'piano fingers' – the children's fingers lightly touching and pressing Dave's body as if it was a musical keyboard. The hand patting also became reminiscent of gently tapping motions, like percussion and beating on a bongo drum.

In addition, Ted in becoming part of the children's material culture is affording the children more spaces and more places for becoming agentic, autonomous, competent and powerful, (Gibson, 1979). Such a position is referred to as 'emplacement' by Pink, in her personification of the value in sensory ethnographic (affective) methodologies and how our sense of emplacement continually shifts and changes through embodied and sensory ways of knowing and learning, (Pink, 2009:62). Thus, the children state how Ted makes the classroom 'feel like home' (see comic panels and page 13), and how such material, multisensory memories, evoke and play a part

in changing and transforming the atmosphere and structured, authoritarian power of the classroom environment, (Holmberg, 2019).

It is an unfolding companionship between the children and Dave-Tails-Ted in a process of 'becoming-liberated' and being-well-together during challenging times (such as SATS) when touching and stroking of Dave-Tails-Ted occurs in rhythms of movement and sensory engagement. These 'striated' spaces are made 'smooth' and nomadic, with the nomad (Dave-Tails-Ted) and the children inhabiting this space and not attempting to dominate it but expand its energy and rhythm. These striations are aspects of the territorialisation of the classroom landscape, which is structured, laden with order, power, and control. Indeed, the researcher's own body became nomadic and hybrid, as they regularly negotiated their researcher-ethnographer-explorer-learner-becoming-native (participant-observer) roles. By being and becoming nomadic-researcher, similar to Ted, resonates in the following extract from my researcher's field note assemblage, in which I became an embodiment of Ted. This also embraces the multiplicity of my becomings.

Extract from field note assemblage 27/10/2017 (Observation 25):

As I am sketching my observations, Billy, who is sitting next to me, reaches out, smiles broadly and strokes my arm then rubs circles on my back saying, "you are Dave-Tails-Ted." In that moment, I feel profoundly aware of my physical presence in the classroom and how I seem to embody Ted. As an ethnographer, this was not only amazing in terms of my 'position' -becoming an egalitarian figure in my relationship with Billy, but how I seem to have truly become an instrument and 'tool' in the research process through my apparent 'embodiment' of/as Dave-Tails-Ted. I feel very humbled and moved, but more so very connected to Billy. I smile back at him and respond by also stroking his arm. The teacher's previous comments now resonate loudly in my head, that she too has felt like an 'extension' of Dave-Tails-Ted and how he affords her 'permission' to touch the children 'safely'. I can appreciate fully how the teacher (and now myself) experiences this as a natural encounter and how Dave-Tails-Ted is affording a different kind of relationship with others in the classroom. It feels hugely monumental.

Ethical Etude:

Power-dynamic shift in child-ethnographer relationship.

This fieldwork observation provided a reflexive point in relation to ethics and the principal and moral issues of power. This was not something I had fully anticipated that I would achieve in its entirety (an egalitarian relationship with the children). I had been aware of consciously resisting the teachers camaraderie as if I might be a member of staff. In doing so I consider it helped enable the research process to become a coconstruction with Dave-Tails-Ted and the children. In seeking their views I was letting them know I was interested and that they were valued. It also reminded me of the need to be ethically responsive and adaptable (which rhizomatic research can facilitate). As the children got familiar with me in the classroom, they affectionately hugged me. Although mindful of professional and ethical boundaries (having physical contact with the children), these moments were in keeping with the unfolding shift in relational power dynamic and a result of my 'deep hanging out' with the children and Ted, (Geertz, 1998: 69).

Comic making process

Once more, I accentuate the idea on non-representation through my use of etudes and enactments, as well as how the children and Dave-Tails-Ted, re-enact movements through the GoPro camera and creative mediums, (Anderson and Harrison, 2016). Understanding my own researcher-child-pupil responses as "enactments" as well as the children's, which are contained in both our bodies, then mediated through a social field, provides dynamic moments of 'affective attuning' (Cho, 2008: 24 & 33). These then produce affective moments in which the data 'glows' and resonates (MacLure, 2013 cited by Knudsen and Stage, 2015:7). These are the non-narrative, unspoken aspects of knowing through the rhythm and tone between bodies within the classroom environment.

Moving diffractively between the artwork and GoPro photographs, in a meandering, rambling motion (considering the camera neither deflecting or reflecting reality) the researcher refers to as making 'plateaus' and creates a diffractive analysis (breaking apart and re-configuring), (Haraway, 1988; Barad, 2007). This diffuses the affective encounters being explored; thereby creating new formulations, patterns and understanding through incorporation of the researcher's mutual embodiment and entanglement in the process Thus, moving and weaving through the data in a non-representational way, attempting to avoid any codification and stratification of the 'data', allowing it to remain emergent and in a constant state of change and 'becoming', (Thrift, 2007). This encapsulates the researcher body as 'tool' and 'instrument', magnifying the compelling nature of embodied processes, (Waquant, 2004:viii). The key aspect of the consideration of the researcher 'body' as part of participant observations allowed me to feel and see in more depth what unfolded in the intimate encounters between Dave-Tails-Ted and the children, and Ted and ethnographer. The ethnographer's embodiment in the experience enables a deep immersion in the experience and revealed rich data in itself, in order to consider and show the affective mechanisms and sensorial aspects involved in child-dog interactions (see following etude Timmy and Dave-Tails-Ted).



Timmy and Dave-Tails-Ted face to face with rhythmic ear stroking, and Ted responding by nuzzling into Timmy'

In operationalising the idea of the researcher's body becoming a 'Body-without-Organs' similar to Ted, they moved in a nomadic way around the classroom, de-territorialised and liberated. However, there are times we both inevitably return to being territorialised and it is this state of oscillation between the two, which opens up spaces of becoming other, breaking boundaries with the authoritarian, ruling, structured and organised environment. Importantly these spaces are *transitional*, which then enable alternative ways of being and becoming together. The children becoming something more than a 'learner' who takes in knowledge, and Ted becoming something other than a school dog to a character in a comic with a mind and voice of his own. He is given a 'comic hero' type of status, therefore not being considered as a PAT (Pets as Therapy) dog, assistance dog, emotional support dog or even a pet, but a friend and supporter. As Haraway has previously asked '...whom I touch when I touch a dog' is a question I have contemplated many times as an ethnographer, (Haraway, 2008:7).

Touch can be soothing, rhythmic and self-regulatory. In this study when Ted is touched and stroked by the children, he affords them something more, such as the role of playmate (ball games, tummy rubs, chase and fetch) and friend.

As Buchanan purports, he also becomes a 'converter' of the social assemblage when he comes together with the children, (Buchanan, 2015: 390). This 'converter' means he disrupts, fractures and transforms the classroom environment and atmosphere, becoming space-maker and disrupting operations of power. This expansion of space within the class room reflects both human and non-human agency and how child-dog interaction is mutually co-constitutive and

de-

boundaries and structures of the classroom routine). This includes the development of new subjectivities and new
modes of embodiment for the children.
This is also revealed in quotes from
the children such as "he gets inside

your boots" (see comic panel page 16)
the children animating Ted's capacity
for empathy, bringing it to life that
which may otherwise be lost in purely
intertextual methods.



Childs pendulum painting



Ethnographer etude





Ethnographer etude

On completion of the comic, the children were asked to make any comments on their artwork. One over-riding and recurring expression from nearly all of the children were that Ted made them feel 'happy'. The de-territorialising potential in the BwO allegory translates into a sense of wellbeing that could not be apprehended as dynamically by more concretised measures. It then seeks to circumvent any bio-medical discourse and territorialisation within the territory-classroom setting.

This is then non-representational not confined to the reductionist codification, classification and stratification of human-animal interactional measures, ensuring affective experience is augmented. The happiness that the ethnographer witnessed and was 'drawn to see' could be *seen* and emotionally felt through the children's glowing faces and beaming smiles. The ethnographer felt it too, as a warmth in their body and relaxation of tension in their neck, shoulders, arms and legs. It can also be *seen* and *felt* through the reading and viewing of the comic panels in the process of pixilating the images and 'lit up' faces (materialising affective states), thereby connecting us more profoundly with the corporeal, embodied and aesthetic nature of the experience.



Pixilation of the photos and materialising affect – where the light shines on the children's faces and glows, in a diffractive cutting- apart- together of the image.

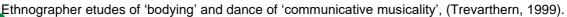
The comic panels in page 6 reflect something similar in which the children use image and text to show us the sensations and states which can emanate and radiate from bodies (yellow lines emanating from Ted's body and the use of yellow with the word "refreshing"- see comic panel page 3).

As Hague, highlights, 'reading a comic is not just a visual process it is a multi-sensory experience', and we are drawn to look at the sensorial elements, i.e., the tactile and affective actions shown through the pixilated images, (Hague, 2014:25). Ultimately, the comic is therefore able to convey a visual narrative which text alone would omit. Indeed, the text is the closure of unconnected rhythmical moments. This method is then a powerful affective tool as opposed to mere conversational and interview approaches to data collection, due to its unique embodied nature. Scott McCloud provides an intriguing perspective on the use of panels. He expands:

Comic panels fracture both time and space, offering a jagged, staccato rhythm of unconnected moments. But closure allows us to connect these moments and mentally construct a continuous, unified reality (McCloud,1993: 67).

In that sense McCloud's assertion aligns very well with the ethnographer's diffractive methodology and approach to the 'data' analysis. This is also in keeping with Thrift's idea of non-representation, and Deleuzian concept of rhizo-matic thinking. The 'happiness' that Ted affords the children could be seen as an affective embodied, reciprocal encounter, not just as a result of their biophilia, or an innate need to connect with nature.

It is a **dance**, a dance they do together, through a loss of classroom routine and what can be termed an interspecies 'triadic bodying', when the assemblage becomes an intensified contact zone made up of moments of disruption, (Holmberg, 2019:28).





These intensities and rhythms forge new identities, where there is a becoming of a BwO and no fixed leaders or structures. Importantly, Dave-Tails-Ted is not passive, subordinate or boundaried entirely.

He is free to roam and wander, avail himself to the children, initiate his rhizo-matic ball game or 'tummy rubs' through his charismatic and cute 'springer sprawl'.



His physical bodily presence is a palpable part of the classroom rhythm and tone. This is a significant consideration with regard to the place of multi-species relationships in childhood and how they have potential effects on well-being and flourishing. Given that children in the UK are considered less happy than many of our western counterparts, this is very pertinent in terms of enhancing children's social and emotional well-being (OECD, 2015).

The 'experiments' in which the children are exploring their encounters (intra-actions) and relationship with 'Ted' is dynamically produced, allowing an unfolding of narrative that is described by several of the children as 'wild' (see Planomenon #1 pendulum painting) a de-stratifying process as it were – a co-constitution and transformative experience for both child and dog. These are shared moments in which Dave-Tails-Ted was equally as animated as the children, almost participating in the painting with his paws stepping in and around the canvas! This in itself becomes the 'refrain', a map of an event fitting together functionally, a setting-off of a rhizome, lines of flight, a breaking free from the flattening of stratification. This marking of territory, produces regularity and repeated, changing patterns of sound, place and space. It therefore becomes an affective space feeling 'like home', an affective atmosphere, and a sensoryscape, through its movement in the constitution of a territory.

As McCormack illuminates:

'bodies have the potential to generate spaces in the process of their movement.... moving bodies have an animating quality inextricable from space and time' (McCormack, 2013:55)

This flow of connectivity between bodies, knows no boundaries or restrictions during the de-territorialisation of space. Therein lies a transformative aspect where Dave-Tails-Ted is seen as not just 'cute' but providing a sense of 'hope', see comic page 15. Thus, the child-canine assemblage enables children to move from one state of being to another e.g., low to high, sad to happy, see comic page 12. He is an assemblage converter, which changes emotional states and emotional atmospheres. In paying attention to these affective moments as *events*, the 'data' appears to grow and shine, and thus takes on much greater significance.

Rhizo-matic rhythms matter a great deal to our understanding of affect, animal-human relationships and wellbeing. The five emergent planomenon's show how the children helped to co-create an affective experience with Ted and highlight the distinct relationship developed between the children, Ted and me as researcher-participant observer-ethnographer.

These connective assemblages fundamentally afford touching, social bonding and communication between the children and Dave-Tails-Ted, thereby enhancing wellbeing and flourishing across human and non-human multispecies relationships

As animals, particularly dogs (including 'school' dogs) seem to be an increasing part of children's family life and material culture, it is important that settings ensure an ethic of care framework which encompasses and acknowledges both children's and dog's agency, (Connolly and Cullen, 2018). Both have a voice and a need to become more 'visible' in the spaces and places they inhabit to ensure their ongoing growth of competence, autonomy, and relatedness. This links with the children developing a eudaimonic sense of well-being through the care-giving behaviours that

Dave-Tails-Ted activates in them, and their acquisition of virtuous and moral behaviours that strengthen their character. Its bi directionality enables a mutual flourishing, being, and becoming well together. This attuned relationship moves beyond hedonistic desire or pleasure as Ted's vitality and energy- 'thing power' (Bennett, 2010: 18) permeated the rhythm and tone of all inhabitants inside the classroom, (Ash and Gallacher, 2015). The collective nurturing (of both Ted for the children and the children for Ted) witnessed in the classroom, materialised regularly in my ethnographer's sketches/etudes. This patterning of affects, movement and interaction is embodied and vibrant. As Deleuze and Guattari, (1987) assert, these are relative to the ideas of what constitute well-being.

Child and canine bodies should not be viewed as passive and subordinate. Each affords the other a multi-species relationship which is mutually co-constituting and transformative (through touch and sensory processing) to one another's sense of well-being and happiness. For example, the deep muscle pressure that Ted and the children provide for one another, during 'snuggling in' together, seen in the etudes with Timmy and Ted and Jenny and Ted and the warmth, softness, and sensation of weight and pressure from one another's body is calming and emotionally regulating both their shared states of mutual becoming's.



Jenny and Dave-Tails-Ted intimately intertwined

Ted's gentle breathing and snoring involve differing vibrations, which also have a regulatory, rhythmic and synchronistic quality from body to body. This tactile and

embodied process seems to be both comforting and enriching for both the children and their teacher, in increasing their capacity for both verbal and non-verbal communication, through visceral and kinaesthetic ways of being and knowing. This mode of connecting and creation of 'pathways' for interacting is significant and visually materialised. I also recall being physically and emotionally regulated and contained from the sensation of deep muscle pressure, particularly during times of change and uncertainty, when Ted would rest his head on their feet. His warm furry body, paw touch and presence infusing and shifting my own bodily state. The following field note extract features this corporeal experience.

Extract from field note assemblage 22/05/2017 (Observation15):

As I become more aware of my own bodily sensations the gentle pressure on my feet from Ted is somehow making me feel grounded and connected to everything around me. It reminds me of the important function of 'swaddling' a baby and how the light sheet 'holds' them- not only just physically but emotionally. It's like Ted is providing me with the same sense of a 'holding and containing' environment and a 'second skin' to comfort and sooth me. The children often sit with Ted on the floor, looking as if both their bodies have 'merged' and I now see this in a very different sensory way. It feels an important function of Ted in the class, and how he affords these moments of security, intimacy and well-being.

Professionals across multiple setting such as hospitals, clinics, schools, and even the family home, are all spaces and places in which human and non-human cultures and relationships are enacted and subject to varying rules, regulations (territorialisation) control and dependency. This study can consider how children's bodies and animals' bodies can be re-configured as BwO's.

This study exemplifies and challenges visually, how institutional power dynamics are played out and altered by the child-dog assemblage(s) showing examples of where power is negotiated and shared between Dave-Tails-Ted and children, for example Dave-Tails-Ted, sharing a chair or desk, going beyond designated 'lines' and 'bound-aries' together (see comic pages 3, 4 and 5).



There is a spatiality to wellbeing, a bubbling and expansion of spaces and places of transition for children to become playful vectors, connected to one another and Ted through their innate desire for human *and* human-animal relationships and encounters, which extend beyond cute, cuddly charisma. Organisations can then give animals a 'voice', making them 'visible' and part of an ethic of care that is beneficial for both human and non-human in becoming and being well together, (Connolly and Cullen, 2018).

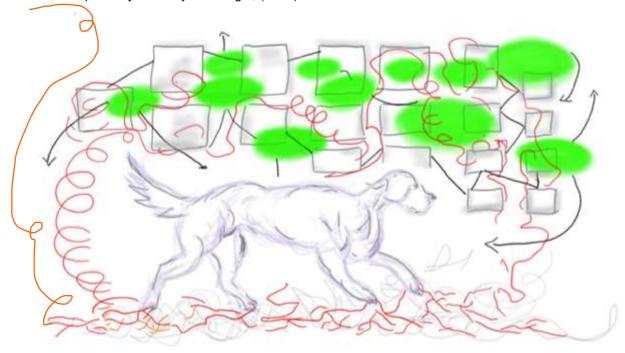
Gallacher and Gallagher argue that researchers must have methodological 'immaturity' as a means to fully include children's voices and participation in research; children being active rather than passive, (Gallacher and Gallagher, 2008). The interesting choice of the genre and medium of a comic creation by the children could be an exemplar of my allegiance and adaption to this 'immaturity'- enabling the children's performative (doing things themselves) production in which both their voice and in part, Dave-Tails-Ted's voice is heard (in how they afford him a dialogue through seeing he has an 'animal mind'). The key aspect of this 'co-production' of

knowledge depicts our mutual entanglements and also rejects the nature/culture binarism.

In addition, by including Dave-Tails-Ted as a methodological axis of difference in the research, it offers a potential mechanism to understand and redress forms of human exceptionalism. In his embodied canine form, he produces movement (and *non-human* data) differently, altering our perspective of space and time. This involved filming child-animal action (use of a GoPro micro-camera attached to Dave-Tails-Ted's harness), agency (affect), and reconsidering Dave-Tails-Ted's role in social/human life. This 'canine-cam' generation of data quite literally helps us see Dave-Tails-Ted's movements and rhythms through a non-human lens. His lively biogeography *and* non-human charisma animated in action, (Ash, 2017). What is evident is Dave-Tails-Ted's appeal clearly extending beyond 'non-human charisma' of being cute and cuddly.

As the children show through their comic, Dave-Tails-Ted is a sentient being with an 'animal mind' and this corresponds with current research findings with Spanish Primary School children, (Menor-Campos, Hawkins and Williams, 2018). This study also amplifies, both visually and materially, how Dave-Tails-Ted and the children create and re-enact 'contact zones' which open up spaces of shared becoming's and multiple subjectivities, (Haraway, 2008:4). These can also be considered as rizospheres and social assemblages created through Dave-Tails-Ted's nomadic and rhizomatic movement. Some of the children aptly refer to these as the creation of 'pathways' by Dave-Tails-Ted, and how he connects them socially and spatially.

Ethnographer Etude of Dave-Tails-Ted as a social rhizome making 'pathways', inspired the children's notion of 'pathways' and by Marc Ngui, (2013).



This study's rhizo-matic format is one, which crosses the lines between different types of disciplines, and it can make connections across several modes of being (biological and social domains can be compared and connected through a process model). It therefore offers an innovative lens with which to view and understand the nuanced mechanisms of child-dog relationships and their shared spaces and places of well-being and flourishing. In the present climate that has seen a rise in therapeutic education, where therapeutic training programmes are becoming part of children's 'curricula' in schools, this study stands out rather distinctly.

The role of Dave-Tails-Ted as nomadic explorer, friend and companion clearly opens up spaces for childhood agency and flourishing – through his becoming a comic 'crusader' Dave-Tails-Ted could be said to have metamorphosed into a champion for children's well-being. His own wellbeing and flourishing are emergent alongside them, bringing together common worlds for improved learning communities, (Taylor and Pacini-Ketchabaw, 2015).

It is interesting to note that the children shared how Dave-Tails-Ted was also metamorphosed into a mischievous character called 'Two-Gun Ted' a story in which he participated during literacy time. This is different to other studies which report on children reading to dogs, (Hall, Gee and Mills, 2016). Clearly Dave-Tails-Ted is not passive, animating and accentuating once more, multiple ways of being and becoming through the children's intuitive imaginations.



Plateau # 3 Opus & Fugue: Part D

Planomenon # 4: Mini Zines of multiplicity, movement, place and space

The fourth workshop was undertaken with a group of Year 4 children. A materialisation of movement was materialised through the children's use of a marble (covered in paint) rolled inside a box by them individually. They chose the idea of making a comic like Year 6 children and collectively as a group decided on a smaller version, a mini zine. Similar to the pendulum painting, the marble rolling inside a box was the most favoured medium chosen by the children. Some children chose to also draw and show Dave-Tails-Ted in the classroom.

Like orchid and wasp, a 'double' becoming. Yet something other than imitation was at play. My picking up of an inner and outer harmonising between myself and Dave-Tails-Ted - eurythmics of bodily states, affecting and being affected.





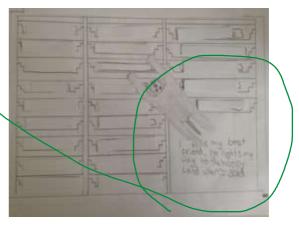


It is interesting that three of the children talked about the spaces with Ted as being 'changes' and how they/he 'changes the timetable' (see etude 'The Land' by Lilly). This is wonderfully articulated by one of the children as they state, 'he lights the way to the happy land' (see etude of Ted animated by Suki). It infers an astute, and almost rhythmic and spatial, temporal awareness by the children.

I sensed, through these drawings and expressions that they enjoyed Ted's wanderings and disruptions during activities and lessons.

I felt very astounded and moved by their perceptiveness and lines of flight manifesting materially. It conveyed such a strong feeling of agency and autonomy. This resonated with me as I had also experienced a similar interfusing with Dave-Tails-Ted.





The following is an excerpt from my field note-assemblage which illustartes this notion of doubling and becomingwith Ted in the zone of proximity.

Observation 28 January 16th 2018:

"Through this new posture I was able to view the classroom as a site of many curiosities such as the inviting children's drawers, wondering what was hidden inside, and corners in which I could place myself out of view of the teacher. It felt mischevious and exciting. Shoes and feet became objects of

interest, how clean or dirty they were, where had they been and why some of them were tapping the floor constantly.

I could wander and roam, touching and smelling everything in my path. I felt the smooth coldness of the floor on my body in contrast to the squares of roughly textured laid carpet at the front and back of the class. It felt strangely animating and I seemed to float around unnoticed and free. I felt unobtrusive when observing the children, and like Ted I slowly walked up and down the side of their desks and tables, making my presence felt, as if I was some invisible being with an invisibility cloak over me. No one seemed bothered by me, apart from the occassional glances or smiles when I made eye contact with someone. I had to contain an urge to chase Ted and jump up and down. When the sound of the children's voices became higher it felt like a vibration through my whole body, like a sensory stimulus and overload and I wanted to jump up and shake! Equally Ted got aroused and grabbed a child's jumper from the back of his chair. I understood his urge to frolic and play. I sensed his pleasure in the children chasing him to get the jumper back. Even more so was the 'pay-off' at the end when Ted was given a treat to handover the jumper. Was I entering a zone of proximity akin to Stern's 'chase and dodge' game in which I was mismatching the rhythm of the classroom, like Ted, finding a new harmonic through ployrhythmia. A staccato (separation) or a deterritoralisation and the production of spaces through bodies as vectors of knowledge and entanglement. It felt like a shared, sponteneous orchestration, a rhizomatic

breaking off along a new line of flight. We were making a different temporality, diffracting and re-configuring the classroom, 'cutting-togetherapart'. It felt fleetingly liberating and rebellious, yet contained and permitted. Perhaps Ted's body afforded a new langage and new ways of relating in the classroom. Like a pause or interlude in the proceedings of learning. A movement break, a time to absorb and digest our own liveliness and being in the world."

Tuning in and Enactive Kinaesthetic Empathy

In a kinaesthetic mode like the picking up and recieveing of a radio signal I tune (like the children) in to Dave-Tails-Ted's true becoming. The concept of kinaesthetic empathy has been described by Shapiro and he highlights the significance of 'space of place'. For dogs, space can be defined and marked as territorial space. For humans we have personal space. Shapiro combines these two ideas in what he terms as 'the space of place' (Shapiro, 1990:190). In this place, a sense of being is experienced, a bodily sense. An awareness of how the social constructions of both species (canine and human) had been shaped by their previous personal experiences, as well as by society, sets the context for fascinating demonstrations of

'kinaesthetic empathy', within the classroom,in ways that avoid anthropomorphism and anthropocentrism.

Shapiro is aware and thus kinaesthetically empathic to his own dog, Shabka's, bodily experience as an important site of their dwelling together, (Shapiro, 1990). Ingold has also captured this in his writings on movement, dwelling and being alive in the world (Ingold, 2013). This production of space, through dwelling together allows for shared agency to emerge, it is enlivening and moves and animates us. Movement and play are essential to learning. As Parviainen asserts:

"We may grasp another's living, moving body as another center orientation of the world through our own kinaesthetic sense and body topography. Kinaesthetic empathy seems to have a partial capacity to make sense of others' experiential movements and reciprocally our own body movements. It makes it possible to understand the non-verbal kinetic experiences through which we acquire knowledge of the other's bodily movements on the basis of our own typography" (Parviainen, 2003:151).

Emerging Rhythmic Events: The rhythm of communication as comic

Ideas and concepts can set the rhythm and stride of fieldwork and participantobservation. As Fetterman (2010) posits, developing a rhythm and pace can guide the ethnographic process. This then becomes a strategy, which an ethnographer uses in the setting in order to focus in on the cultural phenomenon of inquiry. The research actions and methods help to also introduce each workshop task, guiding its visual materialisation of how the children explore their interactions with Ted. This enabled the consideration of the underlying mechanisms at play and how the cultural and peer system functioned. The creative workshops (which I refer to as 'planomenon's' from Deleuze's philosophy) were a focal point for commonly shared thoughts and ideas of how the children expressed through both language and pictures, the ways in which they moved and used space within the classroom with Ted. Far from feeling in the role of a researcher/ethnographer, this became a sense of 'kinship' between the children, Ted and ethnographer-participant observer. This enveloped a holistic and pluralistic orientation, creating a whole picture of the culture, with each scene or

event being viewed as multi-faceted and connected. In this sense, the ethnographer became a human instrument, process mapping the children's and Ted's interactions and encounters.

Rhythm is a critical key component to thinking of affective methodology/methods. Deleuze emphasised the significance of rhythm in his classical work 'Difference and Repetition' (Deleuze, 1994/2014), indicating that repetition is change and transformation. McCormack, (2002 and 2013) has also developed rhythm as an operationalised and visualised approach to thinking and describing the multiplicity of experience. As affect is hard to identify and 'fix', (although this is not the aim of this thesis, it seeks to offer alternative ideas of how affect can be significant to well-being and thus illuminate its meaning in experiences) the development of methods and methodological practices through affective attunement can create a 'poesis of forms of living' (Stewart, 2013).

In his journey through the history of comics, Scott McCloud provides an intriguing perspective on the use of panels. He expands:

'Comic panels fracture both time and space, offering a jagged, staccato rhythm of unconnected moments. But closure allows us to connect these moments and mentally construct a continuous, unified reality' (McCloud, 1995:67).

This is reference to how our perception of 'reality' is perceived through the senses, which only partly reveals a whole picture, it is fragmented, or as Barad suggests, they are moments of 'cuts', cutting-apart-back-together, (Barad, 2007). Only through 'closure' (observing parts but perceiving the whole) are we able to experience what might be between the panels, thus creating a rhythm of sensory movement through visual means. This is also known as synaesthesia – an activation of all the bodily senses; sight, sound, odour, feeling. Having closure happens every time we see a photograph or picture reproduced, our eyes absorb the 'fragmented' black-and-white image of the 'half-tone' patterns, and we transform them into the 'reality' of the photograph, (McCloud, 1994).



suggests, we enter into conversation with the process, we are part of it- affecting and being affected. This is clearly emergent and materialised in my researcher pentimento's (figures 1-10, which follow. This insitu data can characterise and illuminate affect, helping to identify affective peaks, through the rhythm and movement of bodies (bodily gestures or touch), portrayed through patterns of repetition (the refrain) and recurrence (Knudsen and Sage, 2015). Within this paradigm, spatial atmospheres and assemblages produce a 'collective contami**nation'** (Knudsen and Stage, 2015:9) due to attuned kinaesthetic sameness being witnessed.

Stern indicates something similar in his evocative and precise description of 'forms of vitality' and patterns of expressive movements:

Force, speed, and flow of gesture; the timing and stress of a spoken phrase or even word; the way one breaks into a smile...the shift and flight of gaze. (Stern, 2010: 6)

Sexton, et al (2017) has also reaffirmed the 'body' as a visceral site of knowledge production, 'better than text', (Sexton, et al 2017:1) The advantage of considering affect and its transmission in this way means it does not reduce affects to the outcome of a relation or as a force that travels through an environment. Instead, it acknowledges that affects are partly shaped by an objects structure and capacities that are prior to an encounter and are partly shaped by the nature of an encounter, through which 'specific qualities selectively contact one another, which, in turn shape the kind of affect that emerges', (Ash, 2014: 2). This stance is perhaps the least human centred account of affect, which can be useful when thinking about child-dog interactions. Different from the sociology of emotions or psychosocial understandings of affect, an account of affect as *perturbation*, suggests that affects exist without the presence of human beings and can proliferate and emerge between nonhuman things, (Ash, 2014: 2). Thus, both child and dog affect, and can be affected by one another and the environment (inner and outer experiences). This material and vitalist process of observing repetition (or rhythm) in social interactions is the source of emerging difference and transformation, (Coole and Frost, 2010). These transformative ballooning or bubbling affects from the rhythm of everyday life can be considered as expanded spaces and 'vectors of entanglements', (Carlyle, 2017). It is of the refrain, as expertly amplified by McCormack, (2013) and his captivating account of this significant Deleuze-Guattrai concept. The refrain entails the marking of a territory, be it verbal (or sonorous as in bird song) or physical (as in finding your place to sit on the beach, or a place to sit in the classroom). It is a bodily communication and 'languagism' which Ted, as a classroom canine enacts and perturbates regularly. It is an intimate relation where spaces are shared, merged or expanded. The effects of which change atmosphere, through its 'contagion' and 'contamination' between bodies. It produces a refrain of rhythm and vibration though it's very bodily existence and presence. It therefore alters and entangles with surrounding patterns of movement and liveliness or

stillness. It is unseen, but far from abstract or esoteric in nature.

Lefebvre, (2004) offers an expansion of ideas regarding spatiaities, emphasising the importance of everyday routine and repetition, noting a turn in social theory away from conceptualising historical events, to a deeper reflection on the nature of material spaces which humans inhabit. These are empirically materialised social spaces in the sensory make up of space as a cacophony of affect and emotion (Lefebrve, 2004). As my etude attempts to show, whilst producing a 'rhizo-comic' through storyboarding-telling, the process does invariably emerge as a cyclical flow and flux, highlighting the comings and goings, the movements within space where each child offers their own 'tune' and refrain. It therefore 'folds body, self, other humans and non-humans, time-space and place together' (Edensor, 2010:78). Ted and I also added to this orchestration as we bobbed and weaved between bodies and desks, being called by the children, at various points when lines of flight during the event ensued. The sensual and affective experience

are melded together with mental processes. These rhythms have no point of entry or exit, no beginning or end, no order or linearity, just milieu's upon milieu's and folds upon folds emerging, meaning between things, in the middle, inter-being, no beginning or end (note Deleuze and Guattari also use the term 'milieu' to denote the same thing when he refers to the rhizome).

Like a body-without-organs (BwO), it is a dis-organised surface where lines of flight cross and zigzag, (Deleuze and Guattari, 1987/2013). Space expands and 'bubbles' as it is deterritoralised. Children are particularly pre-disposed to being rhizomatic, having yet to succumb to all the restraints of societal regulation and control, or as Deleuze and Guattari, (1972/2004) puts its 'oedipalisation' within the family and through the acquisition of language, exhorting their disagreement with Freud's Triade espoused in his anti-Oedipus stance. Thus, a symphony is composed through embodied ways of knowing and such visualisation and visual practices might re-figure how to account for the senses and emphasise inter-corporeal experience as being significant (Taussig, 1993). A placing

of feelings on paper, as it were. As Sousanis, (2015) disseminates incredible images and innovative graphic shape-shifting examples in his groundbreaking 'Unflattening' project, he dismantles the flatness of sight and its one- dimensional state to open up the multiplicity and potentiality of space, time and experience; 'darting and dancing...animated and teeming with possibilities' (Sousanis, 2015: 16). His emphasis is also upon the moving dynamic and mode of sketching between artist embodiment and production of image. This resonates well with Klee's idea of 'taking a line for a walk' making the abstract appear multidimensional (Klee, 1961: 103). As Sousanis so succinctly comments:

By orchestrating the relationship between elements and the space they inhabit, we can trigger correspondence with experience both seen and felt.' (Sousanis, 2015:75)

The 'Mirroring' Function versus the 'Mimesis' of Drawing (etudes, palmisets, and pentimentos)

The idea of 'mirroring' has been considered in child development by Winnicott, (1975/2014) and Lacan (1966)

respectively (cited by Gallop, 1982). Winnicott considers that 'mirroring' to infants is fundamental to the forming of the parent-child relationship. He depicts this event as fundamental to the infants growing sense of 'self' and their emergent separation (usually from the mother) and individuation. Lacan refers to a 'mirror' stage of development, a period during which the infant begins to recognise their 'self' in the mirror when reflected back. Both of these concepts are useful in terms of my own participant observation of childdog interactions within the classroom. However, my own idea of mirroring as a functional purpose, through drawing and sketching, is to provide an impression, re-enact and 'draw' forth a sharper visual perception of what I am seeing. As previously stated, it is not entirely a mirror or imitation, there is something more at work, a becomingwith and harmonising (eurythmics), (Lefebvre, 2004). This is not coding but picking up and tuning in to the sensory realms of experience. This is one, which has a physical (material) and sensory process entwined within it, an embodied, animate nature to the mechanics of drawing which through polysemic processing, affords an appreciation of the tactile, multi-sensory aspects of what I am seeing.

In engaging my body through an ocular centric medium, I am producing through 're-enactments' a rhythmic event, an encounter, a bloc of spacetime, an 'apparatus' (such as GoPro camera, etudes, and artwork) (Barad, 2007).

Akin to the root system – the re-enactment of nature is also invoked as the non-discursive environment as postulated by Zdebik, (2012). It is these 'non-discursive formations' I seek to make visible, Zdebik, (2012:3).

This resonates in part with O'Neil's, (2001) 'ethno-mimesis' as previously highlighted. Through my etudes, this idea of 'imitation' is through a sense of re-enactment and animation rather than copying, thus non-representational, (Vannini, 2015). Plato and Aristotle expressed mimesis as the representation of nature. According to Plato, all art is a creation and form of imitation. However, the children's comic strip storytelling can also be seen as a material-semiotic tool; a

meaning making, desiring machine. It is a different semiotic to that of Saussure's linguistics, (Saussure,1972/2011). It is material-discursive (a heterogenous overlapping of both the discursive and non-discursive), (Zdebik, 2012). It attempts to manifest and materialise images of positive forces with unpredictable effects.

Post-phenomenology and subjectivity

In order to consider individuality, subjectivity and identity we need to unpack the seemingly incongruent use of a phenomenological stance, which appears uneasy, and in contrast with a Deleuzian-guattarian rhizo-research methodology. Subjectivity is a source of epistemological tension as I endeavour to grasp seeing the world as it appears to the children and Dave. The knowing of others' minds can be seen as an expansion of ethnographic undertaking and an understanding of the social world, (Jessor, Colby and Shwedder, 1996). In observing the lived experience of Ted and the children in the classroom, I am not grounding this lived experience in phenomenology. As I have said previously, experience is connected to both interiority and exteriority (emic and etic). Phenomenology, for Deleuze and Guattari attempts to delineate the constituents of consciousness starting from experience (Deleuze and Guattari,1995). In Deleuzo-Guattarian terms, consciousness is a field (transcendental- going beyond human experience and comprehension) in which the 'me' merely appears – it is never the foundation of the field. The 'me' subject is the object of consciousness and thus, secondary to life. The idea of subject is therefore futile according to MacDonald, (1991). It is also at this juncture that Barad, (2007) and Deleuze and Guattari, (1987/2013) forge an unexpected alliance, in my own interpretation, in terms of their departure from a phenomenological point of view in that the subject it not preconfigured and endowed with agency. These points of mutual contact do not mean that Barad's and Deleuze and Guattari's philosophy repeal one another. They can be said to align in a diffractive way, enabling a *relational* ontology and focus on doing and becoming of phenomenon.

This thesis assemblage embraces a research paradigm with an emphasis on the sensory nature of experience, which is non-representational, challenging the 'Cartesian subject', (Descartes, 1988). This also has relevant undertones of affective qualities which amplify this rhizo-research in what Deleuze calls an ontological process of 'putting things into orbit' (Deleuze, 1995:121). Deleuze also refers to this as something which happens 'in between' and how we must take note of physical movements, (Deleuze, 1995:121). This can be envisioned as a colliding of inner and outer experience to produce an affective atmosphere, prior to cognition, something I have previously referred to as the 'space between' affect and emotion at the elliptical (see conceptual framework diagram in Carlyle, 2017). Furthermore, Deleuze and Guattari, in What is Philosophy? state:

Phenomenology must become the phenomenology of art because the immanence of the lived-through experience (vecu) to a transcendental subject must be expressed in transcendent functions that not only determine experience in general but transverse the lived-through experience itself here and now and are embodied in it by constituting living sensations.. 'The being of sensation, the bloc of percept and affect, will appear...their intimate intertwinement like hands clasped' (own emphasis). (Deleuze and Guattari,1994:178)

This them moves us to the notion of rhythm produced in social spaces and peripatetic practices during events of movement and interaction. This is in stark contrast to the structuralism of Saussure and Levi-Strauss, who posit speech and language as the means to all experience and subsequently knowledge formation, (Saussure, 1972/2011; Levi-Strauss, 1955). However, one can never completely dispel these structures, as they are systemic and embroiled within all narrative and dialogue. It is the choice of methodology and methods, which can challenge this limitation through post-structuralism, and an adoption of affect theory, which this thesis-assemblage takes. As Nietzsche states there can be no 'truth' only perspective, (cited by Deleuze and Guattari, 1983).

The body as a vector and site of knowledge

A crucial aspect of data generation and collection was through the ethnographer's body as a research instrument and 'tool' and the process of embodied encounters. Giving prominence to my body as a researcher, not only enabled a deeper understanding of intra-actions within the classroom but also of my own 'becoming with' (Haraway, 2009) Ted and 'becoming with' the children. This altered view is fluid and affective, revealing closely entangled and new 'e/mergings'. I felt I 'rhizomorphed' into these different roles, sometimes oscillating between 'becoming-with Ted' and 'becomingwith child' within the classroom. The following images could be seen as diffractive (breaking apart and putting back together). By using a 'layering' technique the image is transformed into something else (Deleuze and Guattari, 1987/2013). By collapsing one thing into another in this way time can become more than a singular moment, unlike pictures which 'freeze' and 'flatten' time. These 'becomings' depict a moving, energetic event, (often slowed and stilled through representation). In these images the reverse is invoked to attempt to show the vibrancy and energy of the affective event, with repetition producing a morphed image that seems to 'tremble'.

As Ikoniadou elaborates:

Repetition breeds change. Although photography habitually records the "now" – singling out instances from the seemingly continuous passage of time-morphing multiplies and extrapolating the moment to its openended future, exposing it to potentialities other than those already actualised. (Ikoniadou, 2014: 81).

As I have previously theorised in my conceptual framework, this can be considered and intonated as the 'gap' between affect and emotion, where sensual, invisible, vibratory (sonorous) aspects of intra-actions between the children and Dave-Tails-Ted occur.

Multiple me, the unfolding ethnographer: Multiple becomings and entanglements as a more-than-human ethnographer

A metamorphosis
Like butterfly
Layers and folds
Of buds, of sky

A silent dance
A tale to tell
A fieldwork note
I know so well

Entangled, entwined
Diffracted, aligned
Caught up in rhythm
Of body and mind

Transforming,
Unfurling
Of that yet to be,
A two in one multiplicity ⁵

My participant-observer, ethnographic fieldwork inside a primary school with year 4 and year 6 children and their classroom canine, entailed some unexpected transformations when using

my own body as a 'tool' and research instrument as part of a multimodal, sensory, visual-material, walking ethnographic process. This betwixt position (between two positions) afforded vast insights. These surprising but highly revelatory space-time-matterings; that is human disruption of conventional ideas of space, time and matter by symbiotic connection with non-human entities, emerged as significant events during the research (Barad, 2007). These slices and cuts of space and time, diffract and disrupt present space and time (through sketching, photography, movement and rhythm) and in doing so they create and produce new spaces with shifting forms that blend and (e)merge together. This vastly altered landscape of the classroom was one of embodied, intercorporeal and sensory entanglements with both the children, their classroom dog and myself. Ted is a gentle yet charismatic canine. He is a springer spaniel, now aged 3 years old. He joined the school setting as a puppy following the children voting for him in a mock general election whilst learning about democracy. His carer is

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⁵ Author' poem

one of the teachers and he goes home with her every day. He is now a well-established presence throughout the school, enjoying being part of the school community and culture in a carefully managed way that respects his welfare. My hopes of being accepted into the peer culture of the classroom exceeded all expectations, and in actual and virtual ways I not only metamorphosed into 'becoming-child' but also 'becoming-dog' as I became an embodiment and extension of 'Ted' their classroom dog.

This merging and blurring of body boundaries is described by Deleuze and Guattari (1988) and Massumi, (2002b) as a 'doubling' and 'coupling' which is a key concept in their philosophy of 'becoming'. Seeing this animated through my experiences of immersion in the field was evident though several intra-actions with the children which I reiterate as follows:

Extract from field note assemblage 27/10/2017 (Observation 25):

As I am sketching my observations, Billy, who is sitting next to me, reaches out, smiles broadly and strokes my arm then rubs circles on my back saying, "you are Ted." In that moment, I feel profoundly aware of my physical presence in the classroom. As an ethnographer, this was not only significant in terms of my 'position' becoming an egalitarian figure in my relationship with Billy, but how I seem to have truly become an instrument and 'tool' in the research process through my apparent 'embodiment' of/as Ted. I feel very humbled and moved, but more so, very connected to Billy. I smile back at him and respond by also stroking his arm. The teacher's previous comments now resonate loudly in my head, that she too has felt like an 'extension' of Ted and how he affords her 'permission' to touch the children 'safely'. I can appreciate fully how the teacher (and now myself) experience this as a natural encounter and how Ted and 'multiple me' is affording a different kind of relationship with others in the classroom. It feels hugely monumental.

My body became a more-than-human vector or 'skinscape' through which the children were afforded tactile connection (touch) and communication in an intercorporeal and intimate way, (Manning, 2007: 112). As Deleuze and Guattari, (1987/2013) assert, the concept of the Body without Organs (BwO) forces us to rethink the boundaries of the body and as such I became 'a leaky body' and an extension or prosthesis of Ted (Manning, 2008: 33). I walked quietly around the classroom freely exploring spaces alongside him and became an embodiment of his calming presence.

Plateau # 3 Opus & Fugue

Part E: Data collection & rhythmanalysis (Planomenon 5 continued)

Ethnographer transformation

The concept of multiplicity manifest and materialised both virtually and to some extent, actually. Below are images which depict this unfolding process which I pondered over whilst thinking about the many multiple identities I experienced. This was an unexpected aspect of the research process, but emerged alongside my bodily rhythms and visceral, embodied experiences, during a poignant moment in the ethnographic journey and my own transition in parallel with that of the children.

Figure 1. Ethnographer becoming-child/becoming-pupil/becoming-class mate





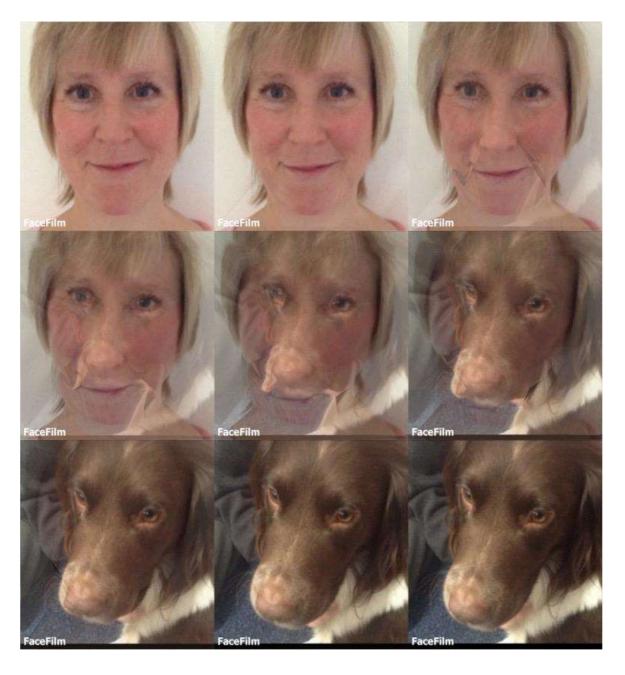


Figure 3. Pentimento Drawing 'Becoming-Child –Becoming-Ted'



Figure 4. Pentimento Drawing "Becoming Ted" walking, wandering and wayfaring (becoming-nomad)

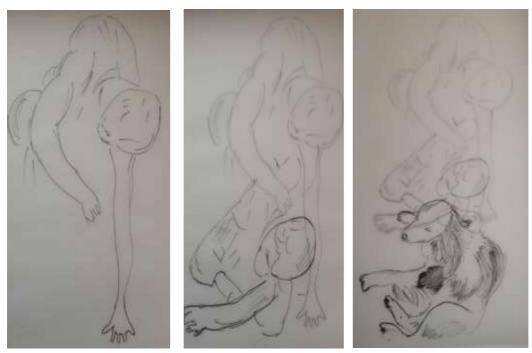
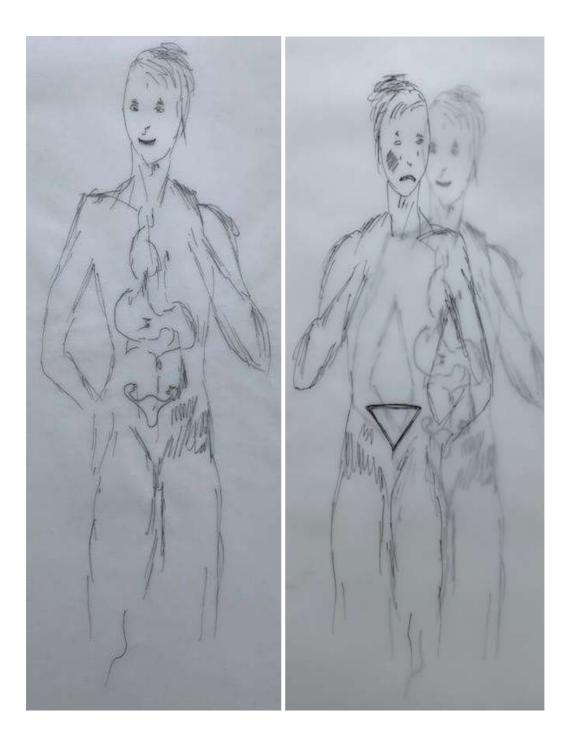
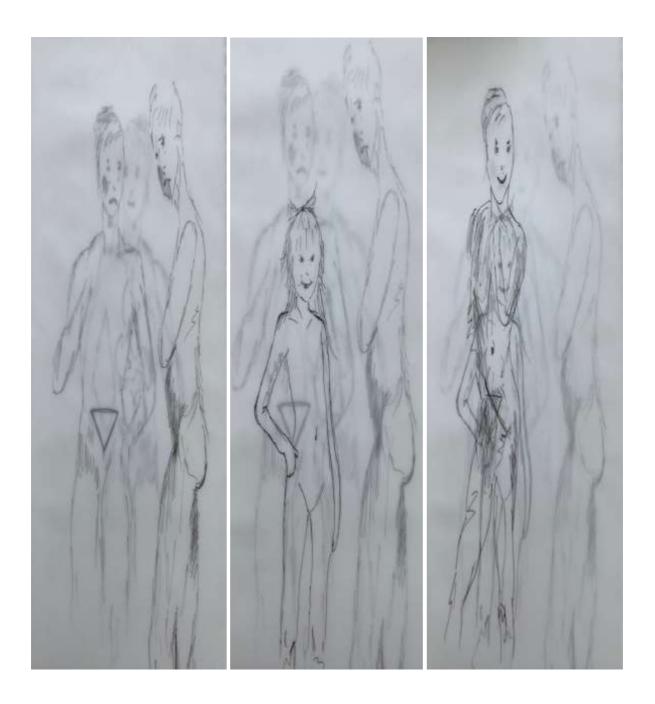


Figure 5. Depicting ruptures of space and time (virtual) toward a metamorphosis of the body that is a becoming-multiple body, transformative and deterritorialized.



Figures 6-10 Pentimentos. A virtual unfolding and renewal of body rhythm, becoming-other following surgery: transitional multiplicity of ethnographer's body in-between the personal and cultural blurring of self (adult-adolescent-child).





In addition to thinking 'what can a body do?' I had a major pause in the rhythm of my research through having to undergo major surgery and a radical hysterectomy/oo-phorectomy in 2017. This distance (temporal, physical) and absence from the field

became a non-conscious, significant factor in my reflexivity as a researcher-participant on (and in) the field in relation to my own role and position. This break allowed new meanings to emerge and materialise, enabling a new and informed positionality to manifest. What I initially found frustrating and stressful became of great relevance on my return to the field. As I contemplated this return, after a four-month absence, I used this way of seeing (paying particular attention to my body) having a heightened attunement and sensitivity to the children's and Ted's bodies in what Lefebvre (2004), terms becoming 'rhythmanalyst'. At this juxtaposition, I was aware that my body became a 'metronome' and a way of recording the affections on my own body and that of the participant's (Lefebvre, 2004:19). This also played a fundamental role in my analysis, in effect becoming a further aspect and unit(s) of my analysis.

This new fragile and delicate bodily state during my recovery phase particularly sensitised me to the children's and Ted's bodies as we all navigated new transitions within the space of the classroom, becoming a collective assemblage of energies and entities. This parallel process became all the more significant as the Year 6 children prepared for moving to secondary school and into a pre-pubescent stage of physical development. Uncannily, this also coincided with Ted's third birthday in canine years- reaching adolescence in terms of his human equivalent years. As ethnographer, my own abrupt lack and loss of bodily organs and hormones (akin to a Deleuzean BwO's) also catapulted me into a new life stage in which I negotiated a sense of feeling child-like mixed with that of maturity and a shift into a mid-life change. This 'back and forth' alteration of my identity unfolded as shown in pentimentos figures 6-10 in what can be viewed as Deleuze's key concept of always becoming something other and something different.

My broad range of human and more-than-human experience was enmeshed and entangled with that of the children and Ted, as we formed and reformed as an assemblage. By keeping with the beat and rhythm of the research and 'plugging in' (Deleuze and Guattari 1988/2013 p 4) to my body as a research tool and source of intensities and affective forces, as metronome, (synchronising with the movements

of the children and Ted), (Lefebvre, 2004). This is also similar to the notion of entrainment, attuning to cues in sounds and movements, (Large and Kolen, 1994). It emphasised the layers of reality (both virtual and actual) where the researcher and participants are intra-active and interwoven through encounters, affecting and becoming affected, and at times being overwhelmed by things that happened. Such instances should not be overlooked or underestimated in their richness of what they can offer research observations and methods. These re-configurations are re-enacted and animated through my ethnographic recording and being 'drawn to see'-using sketching as an embodied process. They can be animated and considered as heterotopic multiple becomings with intracorporeal meanings.

Through this intracorporeal experience, my internal and external worlds collided (of actual and virtual processes) – validated and made meaningful in the following fieldwork notes extract:

Extract from field notes assemblage 08/05/2018 (Observation 32):

The children are having a visitor to class today, a school nurse. There is a hum of anticipation and excitement in the classroom. As I sit next to Scarlett, Kenny walks over and asks if he can show me his book about a puffer fish. I smile and Kenny says, "You look younger Donna". I feel my face go hot as I blush, embarrassed at this lovely, spontaneous and random comment. I think to myself, perhaps the rest and recuperation has made me look refreshed and less tense! Fieldwork can be exhausting and maybe it previously showed in my tired face and body! Then I consider this more than a compliment but that in that moment, for Kenny to say such a thing could also mean I have become-child, and become accepted as part of their peer group. Inside I feel elated. Yes, I have gone native! An ethnographer becoming-native in my immersion in the field and peer-culture as it were. I feel a wave of excitement and accomplishment wash over me. As Kenny points out the characteristics of the puffer fish, bringing me back into the moment through his nature book, the teacher reminds the children they have 5 minutes before that visitor arrives. Scarlett says, "I love Donna. Donna is part of our family, the bestest visitor".

Kenny responds to Scarlett and says, 'get in!' In these moments, my ever-changing, liminal position is one which feels as if I am being re-configured with multiple identities and multiple subjectivities. Archie comes over and asks if he can give me a hug. Scarlett then tells me her gran died from cancer. My body feels overwhelmed with so many emotions and sensations. I look for Ted and find a space on the floor to sit with him. I find his slow, rhythmic and gentle breathing regulating, as if restoring my body back to a calm state. The school nurse arrives, and the children's excitement and curiosity fills the air...

Ethical Etude:

Power in fieldwork

I am aware from this observation of a parallel process between the teacher and myself in how we have both become 'an extension' and 'embodiment' of Ted. This has enabled a greater tactile sensibility to emerge in how both the children and I (as well as the teacher) relate physically to one another. This principle of power has implication in rhizomatic research meaning that power is not something one holds constantly – it can be shared and driven by a culture that is responsive, sensitive, compassionate and adaptable to wellbeing needs. It is also important to consider that my being an adult in an adult body means I am more aware of the need to maintain physical boundaries and seeking permission from both Ted and the children prior to offering hug is illuminated (nonmaleficence). This is also being responsive to individual and cultural differences and family 'scripts' around touch and physical contact.

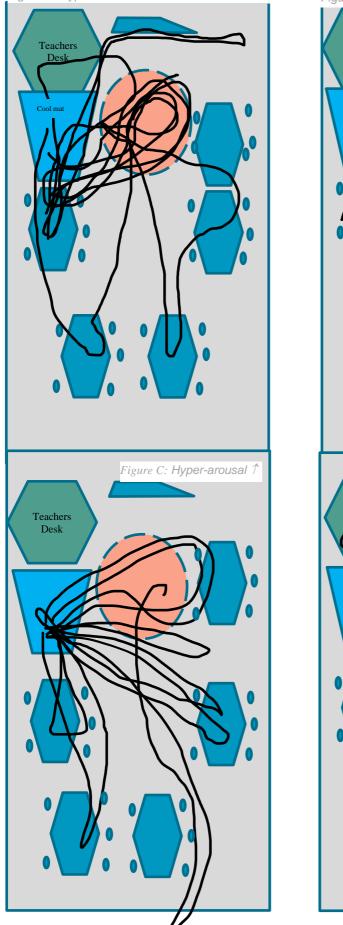
Within my embodied process of sketching and using the technique of layering (pentimento), I have dismantled, diffracted, re-configured and animated the human and non-human bodies in the spaces with which we moved inside the classroom. By being open as an ethnographer and letting go to this fluidity and emergence of the research with all its enveloping and shifting identities, I not only disrupted my inherent power relations with the children, but I became a 'body' with heightened emo-

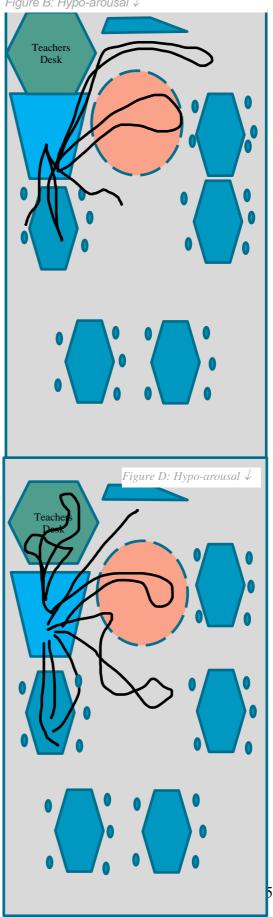
tions and affections through which new meanings were transmitted. My body became, in itself, a site of knowledge production. As Waquant, (2004, p viii) asserts I was invariably "deploying the body as a tool of inquiry and a vector of knowledge".

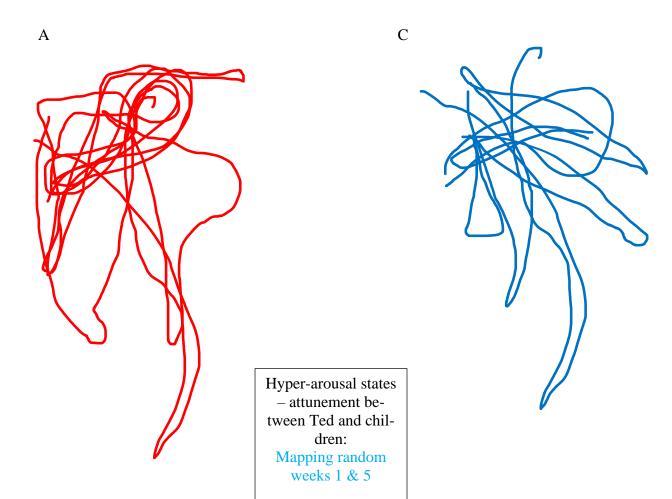
I also like to think of this ethnographic wayfaring as Ronsdal, (2018) so aptly describes, as being-and-becoming something like an impressionist painter, producing a type of 'portraiture' and pen portrait of the field. In agreement with Van Maanen, (2011) I explored not just a 'narrative' but a telling of 'tales' both inside and outside of the classroom, thus bearing witness visually for the reader, to an unfolding of the essence of encounters that would otherwise be invisible, unknown and unthought.

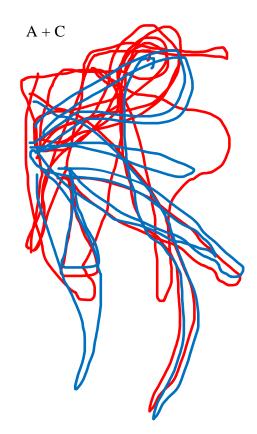
Planomenon 6: What a dog's body can do. Making visible the invisible through rhythmanalysis

Figure A: Hyper-arousal ↑ Figure B: Hypo-arousal ↓

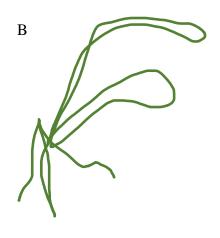






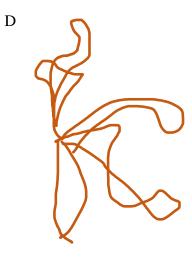


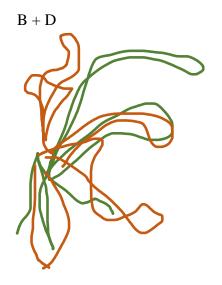
Relational Rhythm's in "Staccato"



Hypo-arousal states
– attunement between Ted and children:

Mapping random weeks 12 & 13

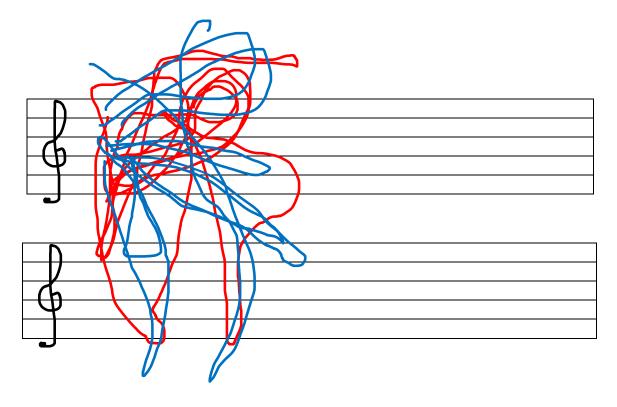




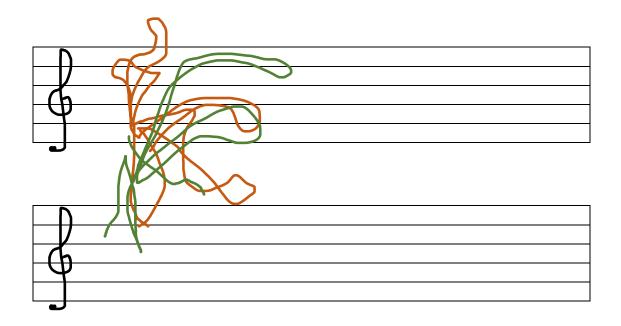


Visualizing a sensory "eurythmic" through Rhythmanalysis: The Classroom as a "Music Machine".

"Staccato" - hyper-arousal creates a crescendo and a de-territoralisation



"Non Lagato" – hypo-arousal creates a decrescendo and re-territoralisation



Tim Ingold writes that the environment "comprises not the surroundings of the organism but a zone of entanglement" (Ingold, 2008: 1797). Knowledge therefore emerges through conversations, exchanges of many kinds of interacting, not from a detached position of observation by the ethnographer. It entailed an embodied, affective and relational research process. This emergent aspect of ethnography therefore opens up limitless possibilities for the creative ethnographer (Causey, 2017). As Ingold, (2011) purports, the use of pencil drawing and sketching develops a graphic anthropology which infuses the material nature of life with culture. The author refers to these as "etudes"- drawing exercises – to depict fieldnotes as materiality and performative (embodied) in assemblages as notes (beyond text alone). In doing so, as Geertz (1998) states, it also enabled a "deep hanging out" with the children and Ted, joining with them, becoming-child, becoming-classmate, genuinely immersed in the process. With them and Ted. The children shared stories of animals, dogs and their families, talked about their favourite games, favourite foods and what they did at the weekends with the ethnographer. They both laughed together, played ball with Ted, stroked Ted, and when they greeted one another they often hugged. The ethnographer became deeply entangled in the classroom culture, rituals and routines, this included clapping in response to when the teacher commanded quiet and becoming rather good at Spanish words. In doing so, the ethnographer could be considered to be also acting on 'intuition' as Bergson describes, (Bergson, 2007: 133-169). Thus, they are a self-reflexive instrument, gaining situated knowledge, acting on the intuition and experience in the flow of real time (Ellingson and Sotirin, 2020).

Ethnographer 'intuition' means that events were emergent as 'data' and points which 'glowed' as a 'sense-event' to relinquish representational approaches and keep with the liveliness of the research, (Maclure, 2013a; MacLure, 2013b: 662). Like the children and Ted, remaining curious, playful and attuned to the classrooms senso-ryscape and considering the ethnographers own body as a sensory and research tool, ensured a synergy and rhythm throughout the participant-observer process. This somewhat betwixt position allowed a non-representational strategy to dominate, so that experiences are considered as they happen and not later changed due to

their potential 'reductionism' in later time, (Vannini, 2015). The classroom thus became an emergent 'music machine' creating new rhythms through animating bodies, both human and non-human. This is revealed in multiple sweeping, sharp and fast movements (staccato) and dulcet, less frequent movements with pauses (non-legato), (see figures A+B and C+D).

Re-enacting disruptions of space and power in the classroom: The classroom as a 'music machine'

Tsing discusses the 'arts of noticing' and how this has the potentiality to engender a sense of 'with-ness' between the ethnographer and participants, (Tsing 2015: 35). This is achieved through both engaging in the shared intimate act of touching and stroking Ted as well as moments of drawing and mapping. It was during these moments that the flows and rhythms of these actions (audible and tactile) in the class-room became apparent and manifest in ethnographic etudes to depict the vibrancy and liveliness, or calmness and quietness of the constantly changing atmosphere. This kind of noticing was through bodily and sensory awareness, 'melodies' as it were, of harmony and polyphony, (Tsing, 2017). In an interesting parallel with the work of Graham (in exploration of duration and time whilst drawing lines,) the ethnographer noticed not only what the sketches were not showing but what they were also 'doing', Graham, (2015: 11).

Reflecting on these series of drawings it became clear that the strokes of the pencil also contained a temporality in a curious synthesis of the moment being retold graphically. They encompass the passage of time in sweeping upward or downward strokes which words on a page could not have achieved as affectively. More strikingly was how the ethnographer came to see Ted communicating in this rhythmic way, encapsulated in and through his body and resultant mapping and asemic marking.

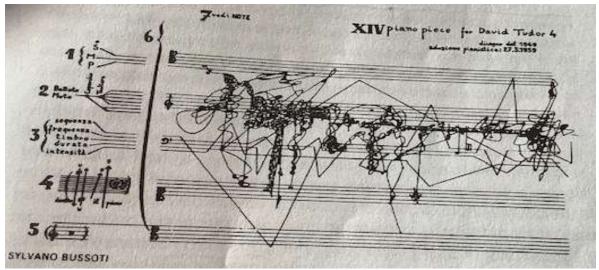
Ted's movements, as well as that of the children, could be described as 'intermezzo' (Deleuze and Guattari, 1987/2013: 26). These are short moments or interludes, performed by them all, between events, 'mileus', 'middles'. They enable a distraction or diversion and lines of flight from the usual 'score' or 'map' of pedagogy. The speed

and up-sweeping of movement and sound culminate in a crescendo of de-territoralisation. Conversely, the slow swaying de-crescendo is a re-territoralisation. It is a dance, a 'dance of animacy,' (Ingold, 2013:100-102). As Olsson states:

The construction of an assemblage does not take place in a rationally planned manner. It must be treated as a little machinery that sets itself going and that nobody really controls. (Olsson on Deleuze and Guattari, 2009:150).

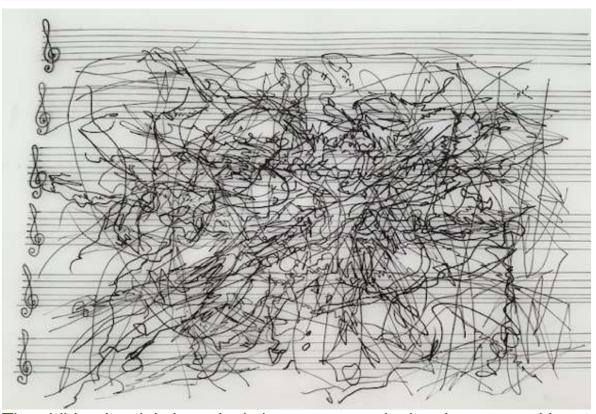
Like a baby taking a pause from babbling conversations, it turns away (intermezzo moment /a pause in the middle) then returns back to the act of conversation. The 'rhythm and musicality of communication', as it were, (Malloch and Trevarthern, 2009). The overlay of Ted's movements (hypoarousal and hyperarousal combined together) on a blank music score also resonates uncannily with the very first page of 'A Thousand Plateaus" in which Deleuze and Guattari depict Silvio Bussotti's composition, (1959), (Deleuze and Guattari, 1987/2013). This musical diagram of 'Five Piano Pieces for David Tudor' is said to function as a rhizome, aiding the readers in their performance with the text. In what inevitably became a eureka moment for me as researcher, I realized that my whole thesis is drawing upon a deterritoralised framework, and in a similar way to Bussotti, I have hopefully materialized and made visible the refrain of affective encounters in a single artwork, by scoring the rhizome, as advocated by Bogue, (2014).

It is rather intriguing that towards the end I return back to the beginning in my analysis of data aligning with the first page of a thousand plateaus and Bussoti's image. Thus seeing the score as a map...



Source: 'A Thousand Plateaus' (Deleuze and Guattari, 1987:2013: 1)

Image re-produced under the 'Fair use' of the Copyright, Designs and Patents Act, 1988.



The children's mini zines depicting movement in the classroom with 'Ted' (layered on top of one another) and 'scored' as a rhizomatic piece of sound.

Scoring the children's and Ted's rhizomes as a musical diagram

It seems rather fitting that at this juncture rythmanalysis becomes all the more animating and captivating in my data. This emergent and organic materialization of experience has also been described by Edensor in his critical stance that narrative does not effectively capture affect, atmosphere, rhythms and sensations in his case of walking, (Edensor, 2010). In addition Mcphie and Clarke advocate a similar turn towards walking and a 'material turn', (Mcphie and Clarke, 2015: 230). In her appraisal of rythmanalysis Dawn Lyon also animates her research of London's Billingsgate fish market in a visual ethnography, (Lyon, 2019). In her rich depiction of the market atmosphere, her body takes up the working patterns of the fish mongers in the market. In a similar way I have shown what Lefebvre calls 'the production of space' and enacted the movement and intensity of the classroom, (Lefebvre, 1991). In this sense of 'space' it is a social space and one which more aptly should be termed 'spacing' as suggested by Horton and Kraftl, (2006a). This then attends to the 'perpetual dynamism...often overlooked in accounts of children's 'spaces' and 'spaces of childhood' (Horton and Kraftl, 2006b: 86). This important distinction means that attention should be given to the unfolding and temporal nature of experience which give way to what Lefebrve considered moments of transcendence, (Lefebvre, 1991). Lefebvre also terms such 'moments' as 'counter-culture' or a 'counter-space', that is, they are forces and intensities that run counter to the given classroom strata (Lefebvre, 1991:349). Through scoring the children's rhizomes this is materialized quite distinctly and could be viewed as a pure or absolute de-territoralisation.

Implications for children's 'spacings' are thus relevant and Ted can be considered to afford differing spaces of childhood becomings and learning, ones which can enable 'moments' of agency and imaginative and creative possibilities. Perhaps Chen's notion of 'meta-sense' which synthesizes the body to rhythmic non-consciousness gives rise to a 'new vocabulary', (Chen, 2018:2; Hayles, 2017).

This vocabulary is visual and sensory. This rather appropriately and significantly explains the children's description of Ted making the classroom *'feel like home'* through a 'meta-sense' of the atmosphere he produces of homeliness which foregrounds

forms of specific experience, invoked by rhythms, to provide a sense of comfort, familiarity and reverie. This is in accordance with what Berlant points out as intimacy being an important aspect of relationships as it creates and builds places and can transform spaces. In this example, 'home' being the iconic emplacement of attachment of intimacy with family, (Berlant, 2000). It is noteworthy that solace can also be gained through routine and repetition. However, what rythmanalysis informs us is that in each repetition there is also difference. These sites of rhythmic production are therefore radical enactments of re-ordering being ultimately relational and reciprocal. Ted can be considered to carve out 'cuts' of space and time meaning the classroom environment becomes one of homely constellations. He affords a different rhythm, a different beat and place-making for the children. These segments (plateaus) can be rhythmic moments, through which the 'senses map a particular landscape' (Degen, 2008:51). My own ethnographer comic and subsequent map of the 'Isle of Dogs' can be seen as my own emphasis of the embodied, sensory and rhythmic significance of my emergent and ongoing experiences. My own bodily response to the very affective forces which enveloped me throughout the research process. Beyond text, language and narrative.

As Graham extrapolates, similar to Klee's idea in 'taking a line for a walk' he offers the example of several drawings he produced with a ball point pen, likewise, the children produced many drawings as lines while time passed, (Graham, 2015). These recordings and 'data' clearly depict rhythmical movements of lines overlaid on top of one another by a process of rhythmanalysis and 'scoring the rhizome' (Bogue, 2014). It is impossible to say when one appeared in relation to the other. However, what we can see is that they form a web, a network or meshwork of intersecting lines of space and time intended to overlap each other. As Graham highlights 'the drawing becomes a record of 'lived time' lived not within a line, but within a drawing together of lines' (Graham, 2015: 70). Bergson highlights the value of considering duration and in doing so we might ask not what an image is but what the image is doing. Thus, the performative, reenactment of encounters can be repeated in both present (real) time as well as past time (folding into each other) in what Deleuze and Guattari refer to as the 'actual' and the 'virtual' realms of meaning, (Deleuze and Guattari, 1987/2013).

As Lefebvre states:

The rhythmanalyst calls upon all his senses. He draws upon his breathing, the circulation of his blood, the beatings of his heart and the delivery of his speech as his landmarks. Without privileging any one of these sensations, raised by him in the perception of rhythms, to the detriment of the other. He thinks with his body, not in the abstract, but in *lived temporality*. (Lefebvre, 2004: 21)

As LeBreton also re-formulates the famous quote by Descartes from 'I think therefore I am' to that of 'I sense therefore I am' – I have given lived (corporeal) temporality to my ethnographic sense-data, (LeBreton, 2006/2020: 1). This enables an intercorporality in animating the data and what Causey delightfully calls 'seeing in them great energy and mind-less direction', (Causey 2020). I am also considering how this aligns with Delingy's notion of 'wander lines' in what constitutes his search for new forms of perceiving experience that is beyond linguistic codifications and modes, with a degree of 'radicalness', (Delingy, 2015:18). My scoring of the rhizomes of the children's and Ted's movements is a radical move away from the current discourses around subjectivity and offers the Deleuzo-guattarian idea of multiplicity and its collective forces to take on a linguistic turn without texts.

In an online communication with Professor Andrew Causey through his interest in my twitter feed that depicted the lines on music paper, we jointly experimented with 'playing' the music score. I conduct some simple instructions which enabled the piece to be played with musical instruments. Professor Causey played his viola, offering an opportunity to make a 'soundscape' to accompany the movements, (Schafer, 1993:4: see also Bailey, 2020). Indeed, Bailey states that these sounds can often be overlooked and are 'created by the geography of a space', (Bailey, 2020: 3). With this in mind we agreed the following impromptu rendition to give sound to the 'Rhizomatic Rhapsody' 'soundmarks' and pictorial map:

My goal was to engage in a musical, embodied performance to re-enact and compose the intimate, affective, sense-events of the children and Ted within the class-room. This can be undertaken either individually or as a group virtuoso. The following directions were composed:

Start upper left

Drift down

Erupt

Shudder

Swish x 3

Drift up

(Repeat)

We practiced using the third movement of John Cages' 4'33' (divided up into 3 movements) = 1'40 using my invented instructions (being playful) about how to interact musically through instruments with the notation.



Professor Andrew Causey's viola, two home-made flutes, a recorder and dulcimer (plucked and bowed). Re-produced by kind permission.



My harmonica used in the playful rendition.

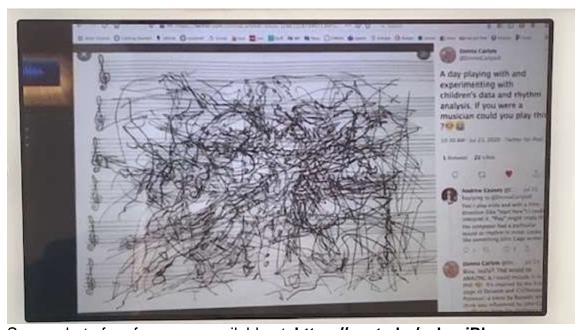


Barney my dog made a guest appearance and joined in the rendition, cooing and howling on hearing the harmonica!

Amplifying the 'voices' and sounds of the children and Ted

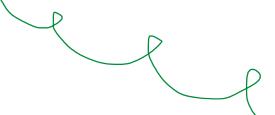


Screenshot of mixing the sounds together.



Screenshot of performance available at: https://youtu.be/w-bcgiRbpps

As Bogue suggests of Bussotti's score, the children's and Dave-Tails-Ted's score which I produced could also be one that depicts a deterritoralisation from the usual classroom organization (piano score in Bussotti's case) and 'a diagram of the composition's abstract machine', (Bogue, 2014: 470).



My improvisation with Professor Causey shares similar 'motifs' with Bussoti's showing rich variations in patterns of movement with a sequence of specific frequency, timbre, duration and intensity. The drawn lines are non-representational forms, organic as opposed to geometrical. As Bogue highlights in Bussoti's piece, the children's lines also resemble tendrils, spider-like threads, plants shoots, stems, polyps and tubers. Fittingly, Bogue also alludes to the generative chaos and a 'point of chaos that leaps out of itself' providing a visual record as planes of consistency, thus lines merging from a single plane to what I call an abstract 'music machine', (Bogue, 2014: 484). This is what Klee refers to as the 'grey point', a 'nowhere-existent something' or 'somewhere-existent nothing' (cited by Bogue 2004:80). In relation to spacings of childhood we could concur that these 'grey points' hold a significant relevance in educational and organizational settings. They chart and map lines of flight that are smooth points in the striated spaces. A soundscape and sensoryscape teeming with possibilities.

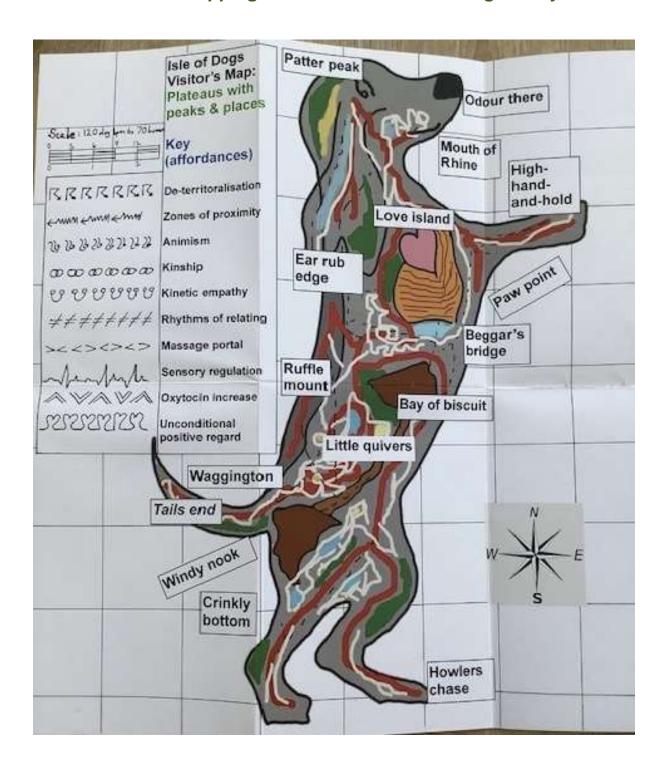
The actual sounds produced can be seen-heard as movements in all directions (please play the intention via video link on p242). They are provocative and hauntingly eerie, as if the chaos and disruption has its own 'silent' accord in the rendition, between the bars, if one envisions and re-enacts the kinetic movement of child-Dave-Tails-Ted bodies alongside Cage's graphic composition style, (see Cage, 1961/1973).

John Cage's musical experiments, as a graphic composer helped me consider further the value in how we can amplify other 'voices' in research, namely Dave-Tails-Ted's. As an Avant-garde surrealist, against stiff aridity systems, Cage's music scores had no bars, thus leaving time open. John Cage's work encouraged my own experimentations when considering how the children 'tune in' to Dave-Tails-Ted's own unique language and way of being in the world, (Cage, 1961/1973). His work resonated powerfully with my 'scoring of the rhizomes' and upon viewing his visual and musical art I was astounded at how similar our enactments were, both in composition and thought. Not having read his work before, I found in it a rich and valuable affirmation of my own rhythmanalysis. In attempting to understand the emergence of events in the research, through the simple overlapping of my sketches/etudes with texts, similar to palimpsesting, in my ethnographer comic; I consider how Dave-Tails-

Ted's entangled fusion is very much part of the process through his movements, kinetics and behaviour. I have tried to re-enact these 'fusions' and 'entanglements' of both the children, the teacher and myself with Dave-Tails-Ted. Furthermore, by considering asemic writing (as I have done so with viewing the children's 'wander lines') beyond mere 'scribbles' and nonsensical doodles, I have enabled a visual narrative for Dave-Tails-Ted, albeit limited. Asemic writing blurs the boundary between text and image, and thus Ted's 'rhizomes' and movements defy meaning-construction, they are non-representational, only emergent to the reader and the meaning they infer themselves upon viewing. It can be considered as unformulated or 'scattered thoughts', so gives credence to the affective elements of experience, (Shankar, 2017). It is an attempt to let Ted 'speak' through his own unique language through my asemic writing of it in this rhythmanalysis, of his movements and interactions. I wish to reinvigorate Gaze's ideas that the notion of asemic writing can be a worthy process and method with which to engage animals, (Gaze, 2008). It is a radical deconstruction of language and becomes an aesthetic object and medium. This has emerged in the process of my rhythmanalysis. Ted, as well as the children, 'speak' in their own unique language, not one which is interpreted by me as researcher. I will discuss this further and its relevance in more detail in Plateau #4 'Rhapsody and Refrain'.



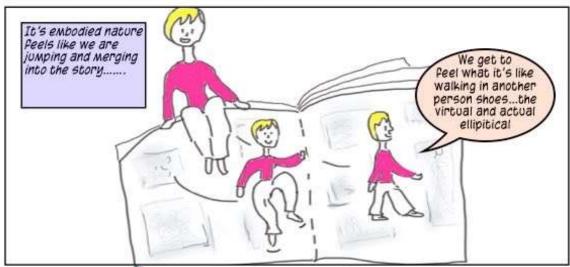
Planomenon # 6 Mapping affordances of what a dog's body can do.



Conventional maps direct us to places and destinations. It often plots for us the most direct and quickest route to take. However, what emerged in planomenon 6 and thinking with and about what Ted's body can do, I considered that the map I created brought forth (t)his perspective further. The map 'Isle of Dogs' is a playful expression of how rhythm-place-dog connections converge and diverge together. Similar to Morphy's writings of the Yolngu tribe's appreciation of aesthetics, (Morphy cited by Cooke & Sheldon, 1992) and also the present-day Zuni tribes in New Mexico,(Loften and Vaughan-lee, 2020) the material and embodied aspects of the map contain 'memory' – embodied memory. It is a map in which you can be immersed by considering the sensory nature of the landscape and its experience. It re-connects us. The following storying is an entanglement of researcher-child-Ted with the rhythms and refrains of our bodies within the classroom. This depicts my own drawings and etudes, with the children's photos and drawings in how they merge and unfold a shared narrative.

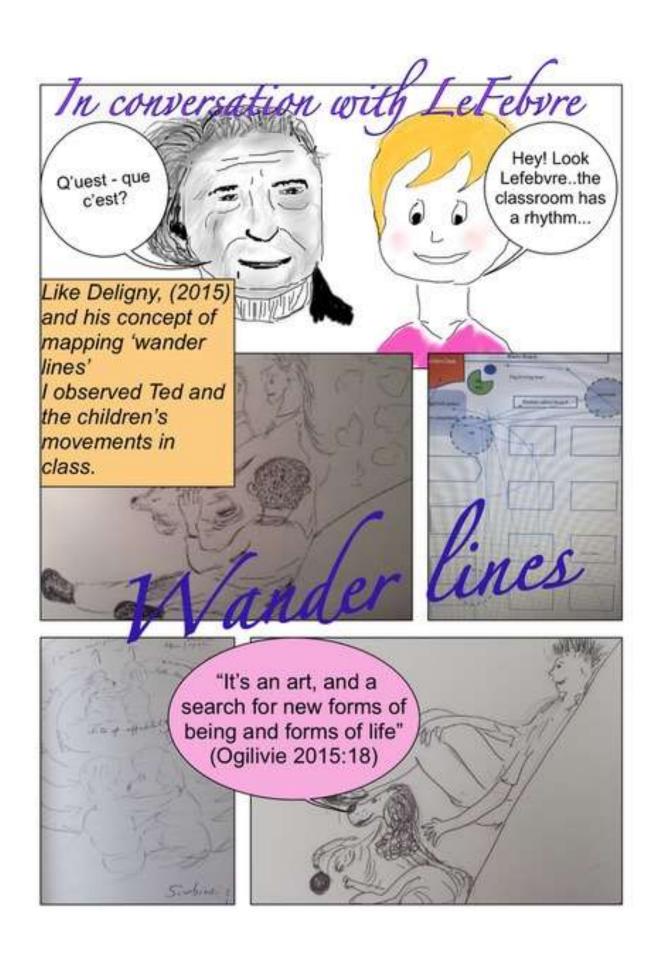
Researcher/Ethnographer finding "rhythms" and "refrains"





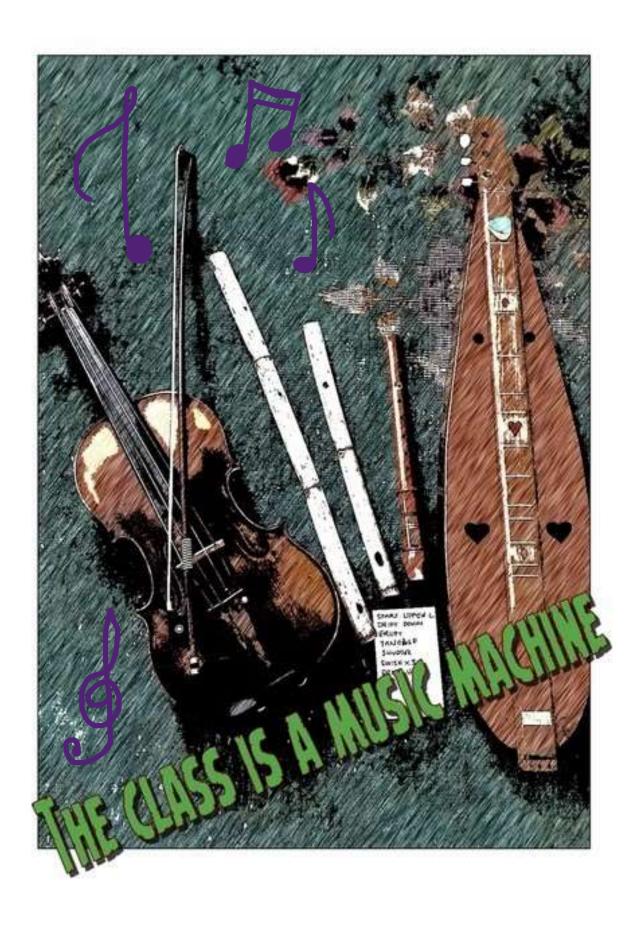




















Like Klee's abstract art, the children's craftwork, painting and comic shows the influence of movement, particular harmonies and polyphonies. We can then conceive of them as musical scores in which we can see and hear the movements and relationships within the classroom, both human and non human.

Jenny's (Y6) sketch of Dave-Tails-Ted

Rhythm rhapsody refrain



My next Plateau # 4 Codetta - 'Rhapsody and Refrain' now discusses further these inter-corporeal encounters of the children and Ted, considering the findings from the research, rythmanalysis and discussion of its contribution to practice and knowledge. The study's limitations are also discussed. This plateau is further emergent as 'lines of flight' in papers published in the People and Animals International Journal for Research and Practice and Entanglements (Multi-modal Ethnography) Journal.

Plateau # 4 Rhapsody and Refrain & Coda

Findings and Discussion

This plateau can be read alongside the accompanying 'Isle of Dogs' map ('what a dog's body can do'). It also formed part of a symposium I participated in for the International Society for Anthrozoology (ISAZ), 2020. There is no particular sequential order to how you wish to read the 'Rhapsody and Refrain' and I encourage you (in reading text and image in synergy) to draw your own imaginings, thinking of your own body in itself as an assemblage...

"We know nothing about a body until we know what it can do, in other words, what its affects are, how they can or cannot enter into composition with other affects, with the affects of another body, either to destroy that body or to be destroyed by it, either to exchange actions and passions with it or to join with it in composing a more powerful body (Deleuze and Guattari, 1987/2013: 300)

The limitations of attachment theory – the turn to optimism and re/turn to affect

I begin this plateau by making the important distinction between reflexivity and diffractive understanding. As both Haraway and Barad point out, the concept of diffraction is an alternative to reflexivity, (Haraway, 2007), (Barad, 2009). As with the whole research process (methodology) I am not merely reflecting back an account of what occurred, but I am exploring and diffracting the data to gain 'situated knowledge' that emerges from the field and through writing, (Haraway, 1991: 190-91). As such my 'knowing' in the world was agentic and interactive, as I engaged with the children and Ted in the classroom and shared experiences to understand the patterns created by our interactions, and indeed our bodies.

My alignment of both Barad's and Deleuze's philosophical positions came about as something of a 'eureka' moment through my re-visiting the perceptive and intriguing paper by Duchinsky, Greco and Solomon, (2015a, 2015b) as I once more grappled with the idea of the 'subject'. This brought me to a further affirmation and desire to

read theoretical and philosophical texts (concepts) *through* and *alongside* one another, to gain greater understanding of their inimitable complexity. It then occurred to me that I was in actual fact doing precisely what Barad indicates, reading them **diffractively**, allowing for new re-configurations in my own thinking. This was also something which I knew was a significant connection to make, that as well as planning the undertaking of a diffractive analysis of emergings and research findings, I was already adhering to a *diffractive ethnography*.

Viewing things diffractively (like I am the metaphorical wave flowing over many pebbles in the academic stream) has allowed for a depth of critique around affect theory to (re)emerge (differently) diffractively at a critical point in the research process. This produces something *more*. Alluding to my previous Plateau #2, and my reconceiving of attachment relationships this has continued with fluidity as a 'reconfiguration' in terms of Barad's diffractive ensemble. By not taking a fixed stance and remaining open to view other *patterns* it has placed me within a de-territorialised writing space. It seems no coincidence that the flow of my writing has improved in this very process of diffraction. It no longer feels stunted or stifled as I attempt to engage with dense and complex ideas (some of which I initially struggled to comprehend and relate to practice in terms of abstract concepts). It was rather liberating and daunting both at the same time. Yet these abstract concepts emerged through, in and alongside the research process, like intersecting lines criss-crossing and weaving throughout eventually materialising a rich tapestry of affective and sensuous knowledge.

My re-configuration or de-construction of attachment theory can be seen as pivotal to this process. A crucial aspect of attachment theory is tied to what Duchinsky, Greco and Solomon, refer to as the phenomena of 'political and gender discourses', as well as conservatism, (Duchinsky, Greco and Solomon, 2015a: 4) and Butler, as a 'sphere of politics' (Butler, 1997:45-46), in how the idea of 'attachment' is 'treated as a discursive construction', in other words it can be considered to 'police' working class families through the states biopolitical surveillance and policing of childrearing/parenting practices. Holloway and Pimlott-Wilson (2014) argue for the importance of geographical considerations and the community context in which parents' function. In addition, the important critique poignantly referring to this as the

'professionalisation of parenting' in the care context, rendering it a 'technical or functional activity' by Ramaekers and Vandezande, (2013: 86) means we begin to unravel the complex vagaries and insights of Berlant's 'Cruel Optimism'. As previously mentioned, Burman's (2007) deconstruction of developmental psychology has highlighted a pathologizing tendency amongst professionals about 'mothering' and working parents with the contradictory claims made about supporting their child's independence (through day-care) and also being reminiscent of a punitive and dismissive culture which plays out such discourses, depending on the political climate at the time and how Bowlby is interpreted. Berlant, in contrast, has enabled a more radical, diffractive notion of what attachment means and how it can controversially entail 'striations' to a child's flourishing sense of self, (Berlant, 2011). This means we must endeavour to explore relations through a lateral (as well as vertical) axis and in doing so we open up the possibilities for seeing relations as entanglements with both the human and non-human elements of the surrounding world. Whether we call this post-humanism, new-materialism or the turn to affect seems arbitrary, however, those lenses do aid the field of anthrozoology, one which continues to grow in terms of the significance of human-animal relationships. What I have attempted to do is to get these multiple discourses to engage with one another as I read in a diffractive way, and in doing so something different has emerged. In point of fact I (re)-turn to the work of Winnicott and his famous quotation, 'there is no such thing as a baby' and find myself saying 'there is no such thing as a human'. How do I make such a radical ontological leap of faith? If we consider the philosophical challenge a Deleuzo-Guattarian lens creates, then we begin to decipher and dismantle the very core of the nature-culture divide. As Deleuze compliments von Uexkull for his theory of 'nature as music' we shift into partial attunements with one another, (Buchanan, 2008: 177). We produce a symphony, a rhapsody between different umweltern. So, the question becomes one of communication and understanding of these different ways of being and becoming in the world. What Deleuze overcame was the fate of 'vitalism' by construing life as 'non-human'. He therefore allowed a revival of interest in the philosophical forms of vitalism (Carlyle, 2018). This perspective means that we take a non-human one, not a phenomenological one – it is the

more-than-human and the non-human that interested Deleuze. Such forces of 'life'

and 'vitalism' cannot be comprehended by the human, it becomes a plane of immanence. As Colebrook evocatively suggests 'if there is such a thing as the human that exists beyond the level of species being, or defines humans as species, it is a certain capacity to negate or question whatever is given as their humanity' (Colebrook, 2015: 217 cited by Roffe and Stark). I therefore question the human 'persona' that negates affective elements of experience and find in Deleuze and Guattari a plane of 'life' that extends well beyond the human organism. As Colebrook asserts, to be post-human has separated us from nature and she argues convincingly for the 'prehuman' and a 'paradise lost'. This profound statement should be given consideration as it brings us back to the fundamental question of what it means to be human, to be a subject. As Deleuze tantalisingly invites us to grow, become a Body-without-Organs, and consider the non-human, the subject is cut from the actual (real) to the virtual (that yet to come) plane of life. The pre-human idea put forward by Colebrook is worth unfolding as it does inevitably bring us back to something more, and something beyond the human, perhaps even rendering the acronym 'post' (human) an oxymoron and defunct. Haraway in her 'companion species' manifesto follows on form her 'cyborg manifesto', very convincingly to reinstate this 'pre-human' notion, and indeed goes further than the Enlightenment period (see Da Vinci's Vitruvian man, Clayton, 2018) of post-humanism, towards an even more radical stance, (Haraway, 2003, 1991). Her comment 'we have never been human' encapsulates this, questioning the human-centric framing of life and hence in relation to this thesis-assemblage, schooling and education. The role of non-human agency (objects, animals, microbiomes and material things) has enabled this thesis-assemblage to bring the body back in to the debate, in attempting to map power and assemblage formations. This de-centering humanity means that 'man' as the ultimate and pinnacle of existence is challenged.

In alignment with Ingold, (2013), Haraway emphasizes the alliance and tension she feels with post-humanism, stating how the issue is that species is in question. As species is about categorization, evolutionary biology, and the specificity of beings, what her idea of 'companion species' illuminates are the multiple strands of being and becoming, through our entanglements in the world. She highlights how species are in question and post-humanism is restrictive and misleading, (Game and Haraway, 2006). Likewise, Bruno Latour attempted shifting from post-humanism, through

the machinic (actor-network), (Latour, 2005), but is goes beyond the machinic to the non-human (the 'machinic' in this sense is not to be confused with the very different meaning which Deleuze gives 'machinic, notably 'desiring'). In bringing the body back into ontological-epistemological debates (not as disparate threads), as both Barad and Haraway contest, a more accurate positionality of the 'post-pre-human' can emerge...

"touch ramifies and shapes accountability. Accountability, caring for, being affected, and entering into responsibility are not ethical abstractions, these mundane, prosaic things are the result of having truck with each other" (Haraway, 2007:36).

This resonates with the field of anthrozoology (human-animal interactions) and what Wolfe call 'zoontologies', (Wolfe, 2003). As Berkoff attests, and this thesis-assemblage concurs, we are bringing education back into the fold of anthrozoology, (Berkoff, 2016). I would also now add, we are bringing anthrozoology back into the fold of the family.

The family assemblage

As Deleuze and Guattari are highly critical of the Oedipal view of the family which Freud purports, it would seem quite appropriate to not only re-configure attachment theory, but the very notion of what constitutes a 'family', (Deleuze and Guattari, 1983). Although Freud will remain a key theorist in the field of personality development, in alignment with Deleuze and Guattari I suggest that the family 'assemblage' should permeate contemporary thinking and attachment theory. This serves several useful shifts in thinking. We can explore the materiality of the family (their relationships with non-human things) and we can challenge the anthropocentric nature of current ideas around the more-than-human dynamics of the family. In my becoming-with the children in the classroom I pondered being part of a 'family' constellation as one of the children had referred to me as such. This endearing reference to my place in the classroom was profound in itself. In addition, it resonates with the story and narrative of the children feeling 'at home' in Ted's presence, literally describing him as a 'brother'. This could be considered anthropomorphic (attributing Ted with human characteristics) however, clearly Ted was more-than-dog and

part of a classroom and school community 'family' just as I was. Yet the children indicate a **multiplicity** to his being, (a friend, a brother, a comic book hero) which is also very different to anthropomorphism, in the sense that they infer a kinship relationship and one in which he is considered protector and guardian. Furthermore, it is quite interesting that as I considered such paradigm shifts of what constitutes a family through a critique of attachment theory, I delved into the genre of the fairy-tale. This playful stance, becoming-child, enabled a degree of de-territorialisation for me from the current dominant discourses and my discontent with the vagaries of attachment theory and its flattening through codification, classification and reductionist measures of relationships and interactions. Viewing the family, and invariably, childhood, through an alternative lens, in this instance the fantastical tale of Peter Pan, I was opened up to different ways of considering what 'growing up' would be like if we think of family as an assemblage. Not as an Oedipal complex or triangle. Not as a Sovereign power. Instead I viewed the family as many things, a group, a pack, an assemblage, a **desiring machine**, (see Carlyle, Robson and Lhussier, 2019).

In seeing Ted as a brother, the children could be said to be giving him equal status within the family – he is not a passive, subordinate, caring subject as portrayed in Peter Pan by Nana the St. Bernard dog. Indeed, within the classroom the children related to Ted as if he were a sibling, a confidante, a close companion. They touched Ted in an intimate, affectionate manner, perhaps something you only do with close family members, if at all in some families. So, Ted's becoming-kin is a poignant return to the beginning of my research questions 'what kind of relationships do the children have with a classroom dog?' and "how do they describe such a relationship?' The answers initially seem simple, yet the profound, intimate and significant nature of these relationships tells us a great deal about children's pre-human and agentic, egalitarian entanglements with the non-human, material world. They do not see nature and culture divided. They do not see Ted as subordinate and passive. On the contrary, they see his place in the classroom as similar to theirs, and at times, and I include myself in this, he is envied for his greater opportunities for nomadic wanderings and escaping lessons. Ted afforded another way of being and of seeing the world, reminding us of the world outside of the classroom. He connected

us to the wider entanglements of both nature and culture, and our family assemblages.

Hence, I have previously referred to Ted as an **assemblage 'converter'** in both text and image, in line with Buchanan's appraisal, (Buchanan, 2015). In doing so, this links to my finding which consider his patterns of relating producing, or more precisely, transforming, and **expanding the assemblage** beyond its co-ordinates of Sovereign striation inside the classroom.

Dog 'word's', body-talk and relational intimacy

Consideration of child-dog intra-actions and the affective elements contained within these we can show how they can be a source of truthfulness and relevance, not merely as a source of bias and inaccuracy (Despret, 2004). These affective and embodied processes and encounters are 'filled to the brim' with moments of 'being moved' and 'moving' (Latimer and Gomez, 2019: 8-9). As such they are highlighting and 'illuminating the social-material interactions necessary for molecular knowledge to happen' (Latimer and Gomez, 2019: 9).

Myers, describes this richly through the work of one scientist-modeller:

'actively handling the model through interactive molecular graphics programs that she can project herself "inside" of and figure out "where she is" within the structure. She achieves this **intimacy** (my own emphasis) with the model by dilating her body-image to meet its form. (Myers, 2008: 187)

'Indeed, it seems as if she is able to morph the perception of her body enough that her own limbs become effective proxies for chemical structures'. (Myers, 2015:110).

This compelling description by Myers is very much in line with this thesis-assemblage, not only through use of my etudes (drawing/exercises) as embodied process and as a site of knowledge production, but through observing the very intimacy of the child-dog intra-actions, which I have previously referred to as 'intimate moments' in

which the quality of eye contact is intense and sustained between child and dog. By igniting this epistemic merit of affectivity, scholars such as Natasha Myers are helping make intimacy a fundamental aspect of how science happens. As Myers asserts, scientists' bodies are 'informed by embodied models that get embedded in their tissues, researchers' bodies become expressive media for the expression of molecular forms', (Myers, 2008:190).

In this sense my own body picks up the energetics and movement of the classroom. Therefore, as Latimer and Gomez (2019) highlight, through viewing intimacy as affect it gains traction not just as the object of inquiry but also as a *means* of inquiry. This then renders sensory, emotional and affective relations in research inquiry to become 'academically respectable' in discussions around knowledge production (Fraser and Puwar, 2008: 21). Intimacy can also be a site of connection and afford an important sense of belonging and alterity in relation to the children and their classroom dog Ted (Latimer and Gomez, 2019). In addition, through ethnographic relations I attempted to also contest and re-configure (through visual-material methods) the politics of relations and my own intimate entanglement (which materialises them) in the way I engage with and in the field of material-discursive practices. These were intensely moving and intimate events and moments with which I became entangled with – feeling their intensities, forces and affects such as touch affords, which compelled me to explore forms of relatedness, ways of intimating and then reanimating and re-enacting the role of affect in the making of knowledge (as depicted in 'agentic cuts' and etudes images). As Latimer and Gomez, (2019) suggest, a rematerialisation of relations, created through communing with them and developing attachments with subjects and objects, as it were. This in itself helped my challenging of dominant assumptions and helped me see situations and events from different perspectives. In doing so I also felt that I was responding to the harmful consequences of human exceptionalism. My deeply personal 'hands-on' involvement in the classroom as participant-observer helped me appreciate and apprehend the important role of intimacy, through touch, as well as the much more complex links it had through the politics of relations that this entails.

As well as triggering a transformative process through touching and stroking of Ted, it could also be considered an interference with learning. As there is such a plurality

to rhythm that can mediate environments and atmospheres of learning from a sensory and emotional regulatory perspective (such as how I described hypo and hyper arousal states), then using a sensory processing framework such as rhythmanalysis means we can appreciate and apprehend the finer nuances of relationships which enhance or hinder learning for children. This might call for a radical shift in classroom organisation as children who thrive in noisy 'polyrhythmic' atmospheres would not fare so well in a serene and quiet 'eurythmic' atmosphere. Indeed, it could be argued that children need a fine balance of the two and how we then manage all the children's individual differences can be explored as part of children's experiential learning through sensory profiles, (Dunn, 2005). Clearly Ted offers a sensory way of relating and as many scholars attest to, the area of literacy and reading has provided strong evidence linking touch and petting (whilst reading to a dog), beneficial, (Hall, Gee and Mills 2016). However, the tactile aspects of this are relatively less defined and exposed in current studies. In point of fact, the focus in education seems to be more on the cognitive performance of children and its significance to their learning. This underscores the limitations of a Cartesian binary in that the body is denied sufficient consideration in children's learning process. Children's 'unruly' agentic bodies are considered in need of control in educational settings. This goes against the very significance and the core benefits of embodied, corporeal learning.

In respect of Ted's canine body, it is evident that to a certain degree the research apparatus in the form of a GoPro camera (attached to his harness) has enabled Ted to 'speak' and show the spaces he likes. This helped illuminate the social and cultural nature of the complex ways in which child-animal assemblages communicate through their bodies and gestures. This is very in keeping with what Despret calls 'rendering capable', (Despret, 2008: 68). What might be conceived as the mundane aspects of the research became 'wayfaring points' in which events and 'data glow', (MacLure, 2013 cited in Knudsen and Stage, 215: 7). In a similar way the children also used the GoPro camera to animate moments of communication and in the photograph here, you can almost see him beckoning the children to look outside the window, and indeed the children did respond and join him to see what might be of interest.

As the children paused with the camera, in a moment of

connection,

Ted waited patiently.

He wanted motion and a response.

He speaks the corporeal



Rhizo-morphing Touch in Childhood

As Mark Berkoff attests, "we must bring education scholars into the fold of anthrozoology", (Berkoff 2016: xi). In addition, Le Breton asserts that animals in childhood awaken a child's senses, (Le Breton, 2006/2020). Children require an education based on a sense of touch and tactile sensibility with the very essence and nature of touch said to decrease and diminish in middle childhood, (Le Breton, 20006/2020). As children engage within education it is therefore important that their ongoing 'sense of self' continues through this mechanism, (Winnicott, 1971).

As Le Boyer, (1974,1976) and Montague, (1986) highlighted in unborn and new-born

infants respectively, the fundamental need for touch, from the foetus being massaged by contractions in the mother's womb, to the receiving of the 'loving

hands' of the obstetrician following the trauma and act of birth, is critical to flourishing. Our very earliest experiences are through the body, the skin and senses. When we discover objects (human and non-human) we first touch and manipulate them, we 'mouth' them to explore further the textures they hold. One of our first engagements in the world is through our grasp reflex which then becomes an intentional reaching out to grasp objects of curiosity. We learn about the world through our bodies. We gain a sense of ourselves and others. As our first relationships are formed,

these senses are further refined and developed through complex chains of interactions and encounters.

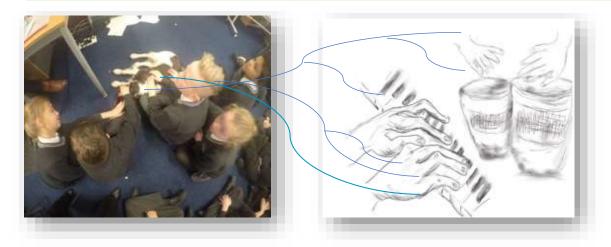
As children are always 'becoming' in the world, the loss of touch has been considered detrimental, and *not* being touched even abusive, (Del Prete, 1998). This 'hands off' approach has permeated schools, with controversy and confusion as to what constitutes 'appropriate touch' and I consider that we need to revisit this prevailing issue. It would seem long overdue. I suggest a 'hands on' pedagogy or 'petagogy' (a term first coined by MacPherson in 1999) can be afforded through not only greater human contact but also non-human contact in the way which Ted, the classroom canine has demonstrated.

The hand is considered an important tool and Aristotle states that nature has provided the 'most useful of instruments' (Aristotle, 2001: 687). As LeBreton concurs, the hand liberates touch...to endow with an exceptional motor and tactile range, (LeBreton, 2017: 101). Therefore, by bearing witness to the tactile range of the children as they touch and stroke Ted, what can be appreciated are the significant aspects of how touch becomes an affirming personal sensation in which the sense of self emerges. A sense of aliveness and connection through their engagement in grasping, stroking and caressing his body. As LeBreton highlights...

"Among the body's techniques, the hand, aided by refinements of the eye and practical knowledge, plays a central role in the possibilities of learning, metamorphosis, and adaption it affords". (Le Breton, 2006/2020: 101-102).

What I have witnessed are the very intricate and intimate hand movements whilst the children engage with Ted in the classroom. They ruffle, rub, massage, tap, flick, and flounce his fur in rhythmical motions. In my own ethnographer 'comic' I have used the metaphors of the children tapping and patting Ted being like 'piano fingers' and gently tapping 'bongo drums' as the mesmeric nature of my observation brought these to mind (see below).

Etude: 'Piano fingers' and 'Drum hands'
The rhythm and musicality of touch and communication between Ted and the children during lessons.



In addition, as my visual materialisation and rhythmanalysis shows, these can be linked to states of either hypo-arousal or hyper-arousal. What is also corroborating is the children's very own account of Ted's affordances and affects in their comic story narrative in which they state he 'energises' (hyper arouses) some of them, (see Children's Comic panels page 3). The teacher, similar to the commonly held view, found this somewhat surprising as she had only ever considered the calming and soothing effects of Ted (hypo-arousal).

Sensory processing is a central aspect of child development that is somewhat under explored in relation to its significant relevance to children's emotional well-being (although this is recognised as an important consideration in children with Autistic Spectrum Disorder (ASD) (Dunn, 2005). Through touch, sensory processing affords comfort and soothing to children. As I have stated, it also affords arousal and energising states, therefore contributing to the functionality of behaviours such as dampening down of hyper arousal states or cranking up hypo arousal states (Dunn, 2005). This in turn facilitates a child's capacity for focus, concentration and learning. The recognition of such sensory regulation and rhythm in supporting emotional regulation (habituation) is amplified by Bruce Perry, a renowned psychiatrist and trauma expert, (Perry,2013).

Within the children's comic they refer to the notion of Ted energising them and helping them work. This very aptly resonates with Haraway in that dogs are indeed good to 'think with', as well as 'live with', (Haraway 2003:5). It is also noteworthy that the

class teacher was surprised at this aspect of Ted's presence, holding the often-common perception that dogs 'dampen down' arousal states, regulating emotions, calming and soothing the children. The affordances of Ted therefore went beyond her immediate expectations, providing evidence and bearing witness to how he highlights, through the children's narrative, his tactile and sensory processing function.

Erin Manning offers an intriguing concept of the 'unboundaried' skin and how by being 'uncontained', bodies and relations can defy categorisation, referring to them as 'leaky', (Manning, 2009: 33). As McPhie aptly states we are 'spread' and engage with fluid boundaries that leak into and out of places, (Mcphie, 2019: 148). Hetherington, (2003) also articulates the idea of *praesentia* (akin to embodied memory) and how children use their bodies (fingertips and hands) in making and marking out place. These are the traces of our mobility, movement, and rhythm that we leave behind, in addition to our scent and aroma. Affecting and being affected, through constant lines and rhizomatic connections. A sense of place, a sense of space, both fundamental to well-being.

This 'marking' of space is something the children are afforded more of through Ted's presence, intriguingly, doing something animal-like, characteristic of 'marking' its territory. This could further be considered an aspect of kinaesthetic empathy (Shapiro, 1990); see Carlyle and Graham 2020), which I will expand upon later.

The Arts of Noticing: Photographs and Etudes

Whilst observing the child-dog encounters a entanglements within the classroom, I see the assemblage as open-ended and mutating. In what Tsing terms the 'arts of noticing' I find a becoming-withness and coconstitution with the material encounter of seeing the co-mingling of bodies, (Tsing, 2017: 35). This enables me to pay close attention to the connections, relations and entanglements (moments of harmony) of bodies and how they change as they participate in each other's corporeal and social life. An 'unexplored territory' as it were (Tsing, 2017: 43). If we notice, through these agentic cuts (slices of time) we can see the details of what encounters are made possible for the children through the conditions of actual more-than-human intimacies. In bearing witness to non-human life in research we are not focusing on the body/object but what they do affectively in their intra-actions, (Barad, 2007). These relationalities are a sympoietic, mixing and tangling in a becoming-with each other, (Haraway, 2016). They are flows and intensities, a doing-with and making-with each other, rendering each other as something more; a metamorphosis, constant becomings and animated, corporeal forms of expression. Haraway herself refers to this 'becoming-with' as a 'tentacular thinking' which is rather quintessentially like rhizomatic thinking. This infers a rather appropriate description of tentacular tangles as we become kin in our multispecies encounters.

As Sheets-Johnson asserts, our movements when in harmony with others are non-verbal, kinetic sensitivities and are pervasive in everyday life, whether we are moving individually or as part of an assemblage in real time experiences (Sheets-Johnson,

2009). In consideration of this it could be that Ted is not only an assemblage converter but also an assemblage conductor, orchestrating swathes of harmonious movements (eurythmia) and changing dynamics of the assemblage. This animate movement gives rise to thinking, hence, Ted is indeed good to think with. As Deleuze states, 'something in the world forces us to think. This something is not an object of recognition but a fundamental *encounter*' (Deleuze,1994:139).

As Tsing concurs along similar lines...

'assemblages don't just gather lifeways; they make them. Thinking through assemblages urges us to ask: How do gatherings sometimes become "happenings", that is, greater than the sum of its parts? If history without progress is indeterminate and multidirectional, might assemblages show us possibilities?' (Tsing, 2017:41).

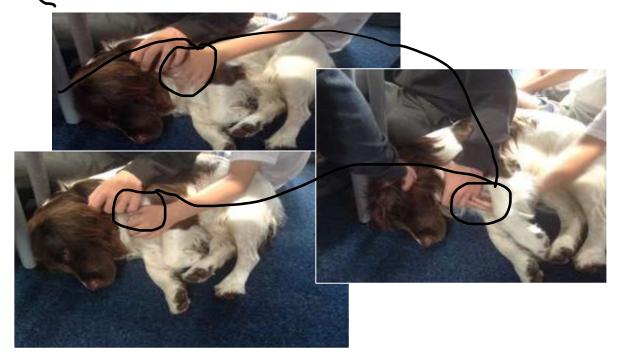
Clearly, Tsing in her reference to the 'polyphonic' variant, also thought that melodies, moments of harmony and multiple temporal rhythms were the kind of 'noticing' that is required to apprehend the changing, dynamic assemblage, (Tsing, 2017:43).

So, the significance of the body as an animate and kinaesthetic form gives rise to potentialities in learning capacity and creativity in children. As Abram points out, the body responds to changes in its affective environment and he emphasises the spontaneous, immediate nature of the gesture that is 'the way of communicative meaning'... 'first incarnate...by which the body expresses feelings' (Abram, 1997: 74). He emphasises the affective and deep-rooted nature in the 'sensual dimension of experience', (Abram, 1997: 74-75). Therefore, there is always a sensual aspect to experience, born from how the body encounters its surrounding environment. We are first material, corporeal, sensuous beings. As Manning reminds us, 'connection is not the locus of all beings, but the invisible-but-palpable link between bodies', (Manning, 2009/2012:14). I have already referred to this as the 'space between' – that which goes unnoticed and unseen. As the intimate touching of the children's fingers shows in the photograph (when they are initially touching and stroking Ted's fur/body) I bear witness to this 'connection' through the 'art of noticing', being 'drawn to see' and making of agentic cuts.

In my creative process as ethnographer, it could be said that my photographs, observations and etudes are an attempt to de-center myself as a researcher. It could be argued that photographs are products and projections and introjections of parts of the self, however, the opening up of space around photographic medium engages me in abstraction rather than psychoanalytical concepts. During the mode of encounter, the interaction the children have with Ted is photographed based upon my observation and perception of space and place, and bodies within that space. Deleuze and Guattari provide a practical way with which to consider form and abstraction, as non-representation in attempting to free the eye as it were from an 'ocular centric' domination, (Kalpadaki, 2007). By engaging in this way with Deleuzian ideas of **aesthetic abstraction** this potential space becomes an important cinematic type of cut between the space of my experience (the virtual, internal world) and external (actual) reality. Photographs can then be seen as creative play with reality that can bridge the actual and virtual, the space in between, and materialise this as a visual form and photograph. These spacio-temporal cuts are emerging 'becomings' and never the finite product. They enable me to notice and observe long enough after the encounters and events to then be able to see these agentic cuts differently, from a non-representational stance with no prior interpretation other than apprehending my body's sensuous awareness and knowledge (ocular in the main, whilst taking photographs). As Barad states, we can never be fully separate from our research as we are entangled and entwined within it, (Barad, 2007).

What emerges through the rhythmanalysis of the ethnographic photographs is how Ted's body become a safe place and space for touch, (see Isle of Dog map in which this location is termed a 'massage portal'). What can be noticed and seen is how the children intimately touch Ted and how this then mutates as intimate hands (fingers) of children touching one another. This may be considered an accidental and incidental occurrence, but through rythmanalysis, going back and forth in viewing the data, these 'wayfaring points', (as navigational) are repeated, not as one-off episodes but several. Hence, they emerge as difference but repetition, each time the hand/fingers intricate movements are different in position yet showing the children repeatedly touch each other's fingers. As Deleuze and Guattari would posit, they are

of the 'refrain', (Deleuze and Guattari, 1987/2013). They are moments in time, repeated and re-enacted, (McCormack, 2013). This is not *tracing* but mapping a form of non-representational experience, exemplifying how Deleuze liberates conscious thought so that we pay attention to the world and its creative, sensual and vital forces.



In times of the Covid 19 virus and its ramifications to social life, we know that social distancing and touching will be restricted in the classroom. The consequences of which for childhood well-being are concerning. If Ted affords a non-human touch and can be helpful in children's learning 'bubbles' then he clearly can fulfil a very significant function, both for childhood well-being and its facilitation of the learning process.



Comics as narrative and storytelling

My own and the children's use of comics as a way of telling and bearing witness to events has been a key aspect of this thesis assemblage. It is notable that the intention to compile a comic was emergent from the children's enthusiasm for them, with several children being fans of the Marvel hero collection as well as other comic characters. I too, found this an ideal medium with which to engage as ethnographer, having enjoyed Beano and Dandy comics as a child.

What is also very intriguing in my own ethnographer comic compilation (see link to full version: https://youtu.be/3pbScduZ3hg) is that I began sketching as an aide memoire during my period of recovery from major surgery and an enforced absence from the field. It was during this time that I began to think about the comic the children had made and how this praxis of "doing" brings theory and practice as a means for change. For Aristotle praxis as a means for change merges theory into action. Comics disrupt the status quo and become something that is morphos and fluid, very in keeping with both Deleuzian and Baradian philosophy. I concur with Nabizadeh, (2020) with how comics also produce space praxis for a dialogue. Paulø Freire states that dialogue is important, and it can potentially challenge the Anthropocene and its destructive forces, helping us to think more clearly, (Freire, 1976/2005). The arts and comics help us re-present and understand our socio-political landscapes and they are fertile, productive mediums for externalising, re-configuring and imagining change through form, function, creation and materialisation. Through the incorporation of the image and texts it supports creative and exploratory responses, and the form of drawing can be therapeutic. In this sense I think my sketching and subsequent comic helped harness a connection in creative and powerful ways. In reading my fieldwork notes in tandem, this process became one of multi-layering in terms of my narrative. These then could be said to be the creative, emergent equivalent to a pentimento or palimpsest image construction with my notebook and sketches combining and merging. It also provided for me a sense of connection to the children, Ted and teacher, during a time of post-operative recovery for me when I was feeling a sense of loss not only physically and personally (having undergone a radical hysterectomy and oophorectomy) but also professionally, sending me into a new life stage and transition. I also consider that this cathartic process was a safe space for me too, a sensitive and productive way to focus on aspects of data that 'glowed'.

Remembering his inception in school is an example of my early reflections and developing of my own narrative. The sense of connecting to them as a 'community' is similar to the idea put forth by Pink, in that we gain a sense of emplacement through the sensorial and material aspects of the comic's creative, process, (Pink, 2011).



The comic, therefore, as a data collection tool privileges and highlights what the children had to say in answering my research question 'what sorts of relationships do the children have with their classroom dog?'. It powerfully animates how they can be supported in the classroom and school environment through the presence of Ted and his affordances.

As Tsing discusses making data, she aptly describes the process of how such mediums help us to notice much more...

"patterns of unintentional coordination develop in assemblages. To notice such patterns means watching the interplay of temporal rhythms and scale in the divergent life ways they gather" (Tsing, 2015: 23).

I shall now go on to animate these affordances more closely in conjunction with my playful 'Isle of Dogs' map. In creating a map, rather than represent or interpret I endeavour to map (narrations) rather than trace reality.

"the map does not reproduce [...] it constructs [...] it fosters connections [...] The map is open and connectable in all of its dimensions; it is detachable, reversible, susceptible to constant modification [...] it can be drawn on a wall, conceived of as a work of art, constructed as political action, or a meditation. [...] A map has multiple entryways, as opposed to the tracing, which always comes back "to the same". (Deleuze and Guattari, 1987/2013: 12)

Following Strom and Martin (2017) in their rhizomatic approach to teacher training, there is nothing in the data to be 'found'. My 'findings' are therefore produced through a mapping activity, drawing lines that connect with multiple events and reenactments that can be considered a 'data set'.

De-territoralisation and counter-space

I consider this a major concept in the work of Deleuze and Guattari, (1987/2013). Like all their lexicons this inter-relates to the notion of a 'Body-without-Organs', which I have previously described as the children's unorganised and agentic formations and cuts as they are intra-acting with Ted. He liberates and frees the children (in so much as far is possible) from the regulation of the classroom rituals and compliance to educational rules and order. This then de-territorialises them from the strata, creating new spaces and 'territories' as it were, in moments and events of animated agentic social actions; thus, forging new assemblages together with Dave-Tails-Ted. They are 'machines', with no organising centre, always becoming something other.

As Colebrook animates through the metaphor of a bicycle and a rider, the machine is based upon connections functioning as a whole, which are transformative, (Colebrook, 2002). I also refer to these as 'wayfaring points', nomadic wanderings within the classroom. As Hargreaves points out, children's experiences of classrooms can be far from positive and the environment is often shaped by tight boundaries with ideologies of 'care and protection', (Hargreaves, 2017: 49). Indeed, this was precisely the case with the children in the research with the teacher strictly outlining the boundaries and material 'ghostly', invisible lines they must not cross. These were predominately 'marked' out around her desk in the classroom. Part of this was her concern and welfare for not just her 'space' but also that of Dave-Tails-Ted, ensuring he would not be disturbed if he was asleep. As my time in the classroom passed, it became evident, however, that these lines were crossed regularly and the children often produced child-dog assemblages in these 'forbidden' spaces, their bodies leaking and spreading out into them, without rebuke. As Paulo Freire's famous work endorsed a student world should be one in which they are free and not controlled, (Freire, 1970/2005). Freire contested that teachers' authoritarian stance could change the consciousness of children themselves, in order to meet the teachers' expectations. So, the question could be a one of justice, social justice in the classroom and Ted challenges this status-quo, disrupting the space through his intra-action with the children affording de-territorialisation. These 'wayfaring points' of freedom and de-territorialisation could be considered through Freire's perspective as challenging of the oppressors (authoritarian teachers') and their power, (Freire, 1970/2005). In this instance, Dave-Tails-Ted's presence could be considered to 'soften' the teacher's stance, whilst she still maintained a degree of her authoritative position.

This de-territorialisation is not to be entirely critical of any absence of some control or order in the classroom, rather it can be considered an inter-corporeal and embodied means of the children having a 'voice' and agency. As Deleuze and Guattari explain, states of de-territorialisation always return to territorialisation, (Deleuze and Guattari, 1987/2013). In transforming the classroom structure and environment, Dave-Tails-Ted's relationship and integration into the setting is therefore a fundamental aspect of their flourishing and well-being. He breaks down the vertical hierarchy of the classroom, affording rhizomatic connections and assemblages (see comic panels

p113 and p114 and see etude p147: vertical and lateral visualisation of relationships previously alluded to).

I also consider that Dave-Tails-Ted, through his very bodily presence can serve as a transformative conduit for a less oppressive regime, of which the teachers becomes entwined with. As the teacher has already stated that Dave-Tails-Ted is an 'extension' of her, clearly their entangled relationship holds great potential for new ways of thinking about childhood and the constructs professional teacher identity can ratify.



The research of Taylor, (2013) magnifies this even further. Her research explores the materialities of the classroom and how the class teacher is observed as a 'chair-teacher' assemblage, with the chair being an object with 'thing-power', spinning, gliding, twirling, tilting, leaning and rolling with the teacher's body, (Bennett, 2010). The Dave-Tails-Ted-teacher assemblage were in concert with one another, as Mcphie states, a 'relational multiplicity... a murmation', (Mcphie, 2019: 147). This 'thing-power' was the power of connection, compassion and affection the teacher is afforded by Ted through touch. Like the metaphor of Ingold's kite flyer, they become a 'dance of animacy', (Ingold, 2013b: 100-102). This is described very succinctly by Rod Michalko in his moving biography of being blind and how his relationship with

his guide dog 'Smokie' game him a sense of being a 'two in one', a dyad and a 'team', (Michalko, 1999: 91). He states...

'Smokie and I are, almost literally, extensions of each other, and the interpretive chain that we inhabit takes the form of a circle (Gadamer, 1986) rather than a straight line'. (Michalko, 1999: 5).

I have previously discussed the teacher's expression of something very similar in her recollection of attending to a child who had been disruptive in assembly and told to leave. On attending to him he became quite teary and the teacher told me how she stroked his head to comfort him 'like she does with Ted', (Carlyle, 2019). Clearly, Ted has many affordances, one of which is significant in terms of a tactile sensibility that is an important aspect of communication. What can be imagined from Ted's afford/dances are the teacher's moments of resistance from institutional "pastoral power", (Palmer, 2001:1389). This is a transformation in her power of compassion and connection through the action of touch Dave-Tails-Ted embodies and facilitates.

Michalko also identifies something else quite striking with the children's narrative of Ted making the classroom space 'feel like home', in that he too refers to himself and Smokie (his guide dog) as a social relation (assemblage) he terms as 'home-making' (Michalko, 1999: 91). He talks about how 'Smokie's self is our self. We are at home together, which means we are continuously making a home for our self', (Michalko, 1999: 91). In addition, I have asserted how Dave-Tails-Ted and the children 'become with one another' and in particular how Ted enables the children to have a growing 'sense of self' in the world, (Winnicott, 1971). This also resonates with Michalko, and how he achieved an 'identity' which no longer meant he was alone but 'alone-together' with Smokie's aloneness in nature, unified and entangled with his aloneness in humanity (through being blind) but coming together in the 'bond of identity', (Michalko, 1991: 171).

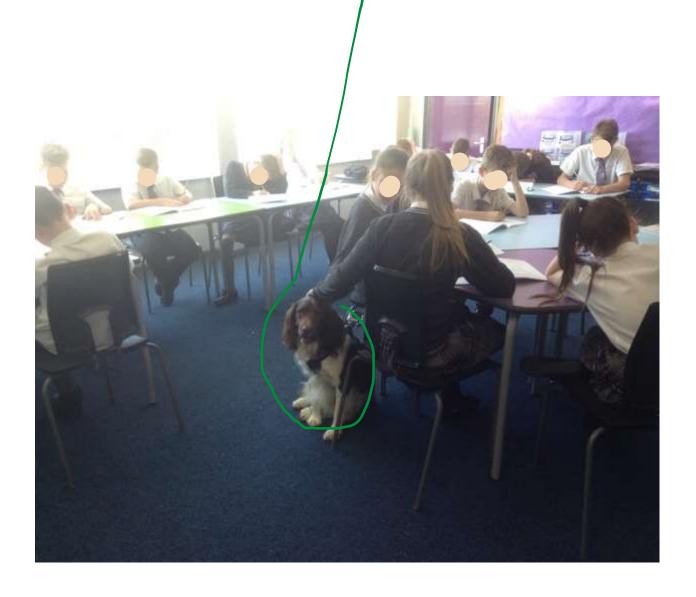
Indeed, the Enlightenment (the Age of Reason) dichotomised nature and society, with humans having power over nature. What is interesting is how dogs, through their affordances to humans, actually have mastery over us. Once again this brings us back to the question of domestication which Haraway and Deleuze and Guattari

have a 'bone of contention' with each other about; Deleuze and Guattari seemingly despising domestication (Bogue, 2015). However, this is a 'becoming-with' and they attest to the relational aspects of human-animal encounters with movements being matched in a process of mutual attunement, with human bodies being transformed 'of their identities', by an animal's body, (a dog's body in this case), (Despret, 2004: 122). Despret brings a positive perspective to domestication and considers these alliances as symbiotic relationships, (Despret, 2004).

I agree entirely with this stance and also how Despret discusses 'being-available' to one another, (Despret, 2004:123). Thus, the question of being wild or domestic is not the main issue. It is whether the human-animal relationship is a mutual 'becoming-being-available'. This is something I have already alluded to, in how Dave-Tails-Ted has made his body 'available' to the children and 'avails' himself in the class-room. He picks up on subtle cues from the children, often an outstretched hand from their desk, and attunes and responds by sitting alongside them and getting touched and stroked in a mutually 'becoming-available' encounter, (Carlyle, 2019).

Ethical Etude:

Non-human (canine) consent, power and doing no harm (non-maleficence). I am reminded here of my position of power when I recall putting on Dave-Tails-Ted's GoPro body harness. Although I had considered the issue of Ted's non-verbal (non-language) consent in my initial ethics process and application, I had not fully appreciated my need to be attuned and sensitive to his body responses. I gently and patiently applied his harness, being mindful of noticing any signs or cues of him being distressed or uncomfortable (such as increased panting, lowered tail curled inwards, shaking, growling, whimpering). I also monitored his movements when the camera was operating to ensure that he remained relaxed, calm and happy to wear it.



This is termed 'anthropo-zoo-gentic practice' by Despret and amplifies my bearing witness to new configurations of child-dog relationships and rhythms, (Despret, 2004: 122). In terms of ethnographer participant observation, I have also considered this in my 'multiple' becomings, in my 'becoming-being-available' with Dave-Tails-Ted, through the experience of loving and shared experiences with him – a "withness" (Tsing, 2015), (see pentimento's, Carlyle 2020). I like to refer to this as rhythms of relating, in which bodies connect, move and correspond with each other.

Ingold provides an aliveness and dynamism in this sense, which resonates well with what I also call 'wayfaring points' and how this helps foreground the privileging of the body in space and place.

As we have seen previously Dave-Tails-Ted's springer sprawl' invites and initiates touch in an act of love and his becoming-available' to the teacher, children and myself, (Carlyle and Graham, 2019: 4).





Advocating Dave-Tails-Ted, the 'pedadog'

The concept of 'withling(s)' has recently emerged from other scholars of child-animal relations and I wish to reiterate this idea in alignment with their thinking, in how the children and I co-mingled together in the classroom in more-than-human imaginaries through art, assemblages and poetry, (Tammi et al 2020), (see Carlyle, 2020). The intersection of childhood and animals with education describes wayfaring points in the classroom and the notion of roaming pedagogy' in what Young and Bone would call Ted a 'pedadog', in how he permeates spaces, disrupts borders, boundaries and territories of child-animal relations in the classroom, (Young and Bone, 2020:1380). Dave-Tails-Ted is materially discursive, embodied in children's material cultures, family life and is entering into the fold of education. Since the inception of the research other schools have engaged dogs in their settings too, with 'Doodles' a fur-

ther example of how the school dog, as pedadog, holds multiple possibilities and affordances in childhood, (Drabble, 2019). As Haraway claims in her Companion Species Manifesto...

"I have come to see cyborgs as junior *siblings* (own emphasis) in the much bigger queer family of companion species" (Haraway, 2003:11).



Ted as a pedadog enables a new way of considering radical departures from current ontologies of how children understand the world. He provokes thought around power relations, ethics of care and relational imagination, (Young and Bone, 2020). As Ted is granted permission to 'wayfare' and roam, becoming nomadic in the classroom, as an ethnographer I have been able to bear witness to his freeness in action and how he affords the children smooth spaces of 'biopower' and moments of resistance from institutional 'pastoral power', (Foucault, 1982). My fieldnotes have recorded moments in which I also become-animal-Ted (not in the literal sense of course) and 'wayfare' in the classroom, sensing his liberty, privilege and freedom.

In a similar version of 'thing power' the use of the GoPro camera can also be considered an extension of the children's bodies, using it to create moments and slices of events and time.





Children learn in positive atmospheres and in settings which allow them a 'voice', a 'narrative', and feelings of autonomy, (Hargreaves, 2017). Perhaps, as the teacher suggests, Dave-Tails-Ted can facilitate a more equitable teacher-child *relatedness*, with the children feeling 'respected and cared for' (Ryan and Deci, 2000: 64). One which exudes compassion and affection, not dominance and regulation. As the traditional layout of classroom design does not always foster relatedness (and indeed in Covid19 times, isolation) then this aspect of relatedness is all the more significant. As the children say Dave-Tails-Ted makes the classroom 'feel like home' (see comic

panels 3 page: 180), this is a further example of the de-territorialising nature he has, bringing a powerful sense of safety, security and belonging to the children. As Deleuze states, de-territorialisation produces an image of 'pure affect' and occurs when an event of becoming escapes from its original territory, (Deleuze, 1986: 96). In keeping with his philosophy of sensations and affects he defines this 'affect' as 'dividual' – an important distinction from the 'subject' and 'individual'. He states...

"The affect is impersonal and is distinct from every individual state of things: it is none the less *singular* and can enter into singular combinations and conjunctions with other affects. The affect is indivisible and without parts; but the singular combinations that it forms with other affects form in turn an indivisible quality, which will only be divided by changing the quality quantitatively (the 'dividual'). The affect is independent of all determinate space-time; but it is none the less created in a history which produces it as the expressed and the expression of a space or a time, of an epoch or a milieu (this is why the affect is the 'new' and the new affects are ceaselessly created, notably by the work of art)". (Deleuze, 1986: 98-99).

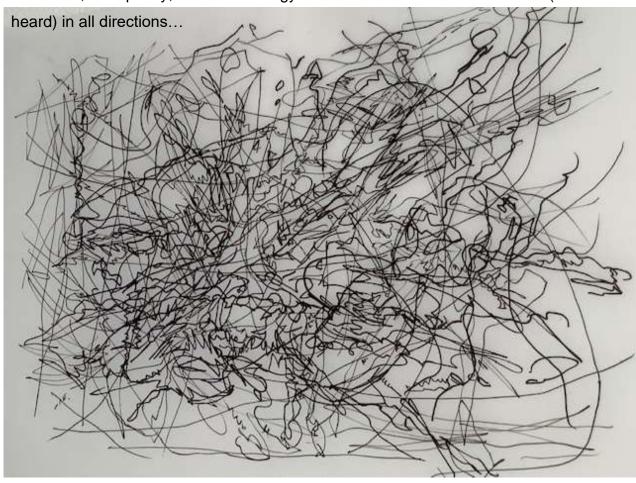
Ted could be said to produce a dynamic affect of intra-actions, encounters of machinic connections with de-territorialising productions. The children then become 'desiring machines' or 'war machines' – similar to those explored through the tale of Peter Pan and the Lost Boys as they de-territorialise ideas and constructs of childhood, (see Carlyle, Robson and Lhussier, 2020). Such movements and flows of communication and and co-constitution of one another enable new timelines, new spaces, lines of flight that are enriching and transformative events for both the children and Ted, neither rendered able without the other.

The de-territorialised space produced by the co-constitution of Ted and the children is also aptly described as 'smooth space' as opposed to 'striated space', (Deleuze and Guattari, 1987/2013). They detail a rhythmic and melodic quality of this smooth space and territory...

'The striated is that which intertwines fixed and variable elements, produces an order and succession of distinct forms, and *organizes* (authors own emphasis) horizontal melodic lines and vertical harmonic planes. The smooth is the continuous variation, continuous development of form; it is the fusion of harmony and melody in

favour of the production of properly rhythmic values, the pure act of drawing a diagonal across the vertical and the horizontal', (Deleuze and Guattari, 1987/2013: 556)

This 'continuous variation, continuous development of form' is demonstrated graphically in the children's scored rhizomes from their mini-zine comics. It can be seen as a virtuoso, a rhapsody, filled with energy and movement which can be seen (and



Ingold amplifies this 'music/movement score' when he says 'this texture is what I mean when I speak of organisms being co-constituted within a relational field. It is a field not of connectable points but of interwoven lines, not a network, but a meshwork', (Ingold, 2008: 1805). It is their 'home', their 'meshwork' of weaving their lines through the world. It shows how their energy permeates the classroom environment in their entanglements with Dave-Tails-Ted.

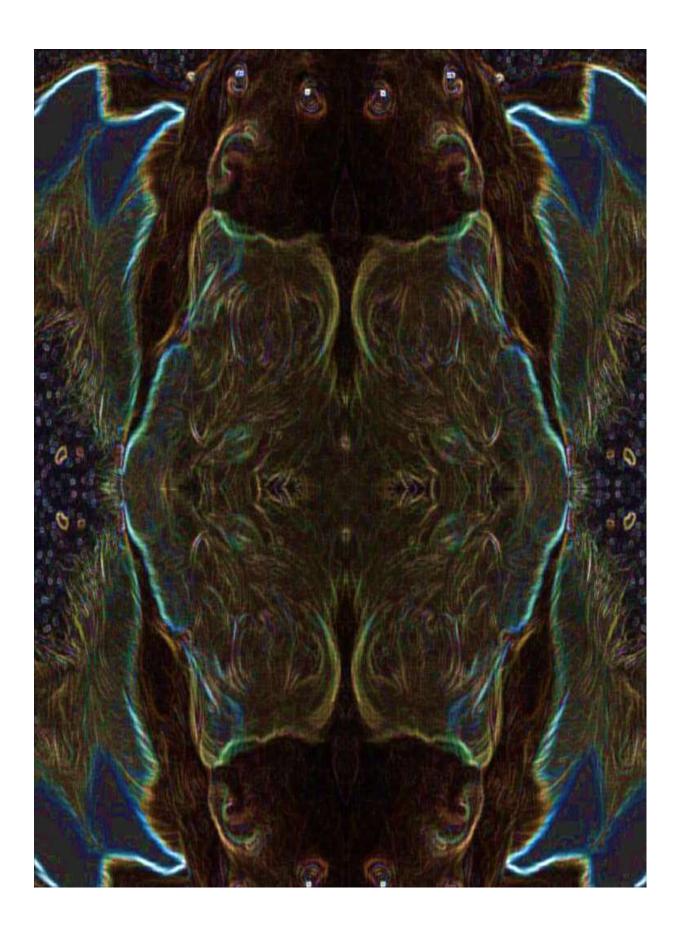
The re-enactment of movement made possible through artwork and the children's pendulum painting and paint ball marble in a box, (as well as string, craft wire and lace) materialises the children's de-territorialisation's as events in which they express

Ted's 'pathways' of connection which he affords (see Children's Comic page).

Noteworthy was Dave-Tails-Ted's production of these important pathways and spaces for the Syrian children in the classroom whose first language was not English. Through what I call Ted's 'rhizomatic ball game' he disrupts the striations and opens up these spaces, connecting the children through flows of movement's (rolling the ball back and forth) and affects.

In events of de-territorialisation, I consider there is also a production of what Lefebvre calls 'counter space'. (Lefebvre, 1991: 349). In fact, there is a parallel with Lefebvre's notion of 'counter-space' and Deleuze and Guattari's notion of de-territorialisation, (1987/2013). Lefebvre considers counter space as also holding potentialities and describes it as "a body which by putting up resistance inaugurates the project of a different space (either the space of a counter-culture, or a counter space..."), (Lefebvre, 1991: 449). It would appear that the idea of de-territorialisation does indeed produce a counter-culture, one in which the children are dynamic, alive and agentic. When the classroom community runs counter to the established order (territorialised) we see the emergence of events and spaces of play. These counter-spaces can be akin to the Deleuzo-Guttarian 'war machine' which Lefebvre says, 'shakes existing space to its foundations...within the purview of power', (Lefebvre, 1991: 383).













In considering Deleuze and Guattari's lexicon of de-territorialisation and space, in particular the production of smooth space, the movements and flows of the child-dog assemblages disrupts the nexus of power and powerful territories of authoritarian teaching. This power and seemingly socially unjust culture in the classroom and

school positions children as in need of protection, regulation and control, whereby Deleuzo-Guattarian philosophy acknowledges their multiplicity in being in the world, which embraces fluidity and provides a realistic challenge to dualist Western thinking, (Watson et al, 2012). Furthermore, as Watson et al, (2012) purport desire fulfilment or eudaimonia (living a flourishing, virtuous life, drawing upon Aristotelian notions) and 'desire theory' (Deci and Ryan, 2008) is something that is remiss from today's classrooms...

"This is a right that we have excluded children from, where the exertion of desires/hedonism has been viewed as inappropriate by paternalistic practices", (Watson et al, 2012: 204).

In the development of spaces for well-being and flourishing (in classrooms) for both the children and Ted, clearly a professional ethics based upon a relational ontology and Deleuzo-Guattarian philosophy is warranted. Consideration of child-dog encounters and intra-actions as emergent systems and sensuous bodies of knowledge can lead to greater happiness and agency of children. These findings support the study of children's geographies and sensory spatialities, already a growing area of research that goes beyond psychological and developmental approaches, (Hackett, Proctor and Seymour, 2015). There are also some examples of research that show similar findings in children's 'making' of home and place, for instance see Gallacher and children's nursery spaces, and block play (Gallacher, 2005, 2006). Furthermore, as Tim Ingold points out, environments (such as classrooms) are 'zones of entanglement that occur along the life paths of beings' (Ingold, 2008: 1807). Thus, the context of space and place are meaningful to childhood studies, and the spaces children share with others is important to attend to, both in terms of flourishing and learning. Of course, Dave-Tails-Ted's affordances in the space of the classroom will be different for each child, even less positive, particularly if some children have allergies, and a very physical reaction to his presence would not be considered ideal. Likewise, for children with dog phobias. However, what was most striking is that when the children were asked about their allergies and being with Ted they chose (with their parents) to use ant-histamines to combat any allergic reaction to his fur and hairs. Perhaps the point here I raise is one of choice and childhood agency, and that the children can choose to be with Dave-Tails-Ted or find their own place and space. In regard to dog phobia's the school also carefully managed the school spaces, ensuring no children were upset or distressed in his presence. Dave-Tails-Ted could be conceived as a 'catalyst' in this sense, giving the child a 'voice' and 'agency' for discussion with staff and parents about the places and spaces they share together. Dave-Tails-Ted has prompted the consideration for spaces to be open and unbounded and the opportunity to explore the different intra-actions and relations that contribute to their place-making. He has done so by my tracking and observing with wonder and curiosity, the socio-material traces of affect and seeing the transformative power of 'boundaryless bodies', (Gherardi, at al, 2019: 302). It highlights how children's spatialities are under stated, (Hackett, Proctor, Seymour, 2015).

What the children also create are social productions of spaces through child-dog assemblages with Dave-Tails-Ted. As the numerous photographs and etudes visually show, there is evidence to substantiate what Lefebvre argues, as space being a social product, (Lefebvre, 1991). However, unlike his macro and larger-scale description of city rhythms and spaces, what I have been drawn to see are also the micro level (or dividual level) of engagement in spaces with Dave-Tails-Ted. In attending to spatiality, through asking the question of how children share spaces with Dave-Tails-Ted, I have been able to think about the collective, emplaced aspects of the research to allow embodied ways of knowing.

Although this thesis-assemblage describes a Western culture in which the demographics were rather mixed, with some affluent wards and disadvantaged wards both part of the school community, it would be interesting to undertake similar research within a different culture and demographic. As dogs can be less revered in some cultures and seen as 'unclean', such as in Islamic and Muslim communities, these are potential limitations of this thesis-assemblage. However, as I have previously mentioned, the inclusion of Syrian children from Year 6 whose first language was not English benefitted from connection with the children through Dave-Tails-Ted's playful 'rhizomatic ball game.' Hence, he afforded a way of relating and communication when language was clearly a barrier. In addition, the school embraced a multi-cultural approach and several of the Muslim children that participated in the

study were happy to share a classroom with Dave-Tails-Ted and interact with him, albeit as part of a 'Westernized' culture.

Kinship

I began my research by reflecting on my clinical work with young children and how a little girl's comment that her dog was her 'brother' struck me as being worthy of further consideration. I even drew her and her pet dog 'Socks' in my opening plateau. I did not realise the significance of how powerful this statement was to be in my research. If we consider 'truth' as repetition of findings (as is the way with quantitative methodologies) then we can certainly see how I have been able to bear further witness to this phenomenon in the classroom. As I have previously discussed, the children's intimate relationship with Dave-Tails-Ted became apparent through artwork, conversation's, images and etudes. Such a close bond might not seem surprising as we know 'pets' become strong attachment figures across the life span, (Kurdek, 2008). What is notable are that several of the children in this study referred to 'Ted' as a 'brother' and indeed this resonates with our very enmeshed historical and cultural entanglement with dogs in the Western world. As Horschelmann and Colls assert, much of the work in children's geographies and to some extent children's spatialities, has focused on parents and adults, (Horschelmann and Colls, 2010). Little consideration has been given to cousins, siblings, step-children, step-parents, aunts and uncles. Judy Dunn's, (1983) work has attempted to redress this imbalance from a human perspective but where are the animals that have intimately permeated family life? There are some current examples in which scholars are now exploring child-animal relationships such as Taylor, and Pacini-Ketchabaw, (2017) in children's interactions with racoons, and Malones, (2015) post-human exploration of children's encounters with street dogs in La Paz Bolivia. Studies in Spain and Scotland have also explored from a psychological and animal welfare perspective, the relations children have with dogs and how these can be a vehicle to promote animal welfare and prevent animal cruelty, (Menor-Campos, Hawkins, and Williams, 2018); (Hawkins and Williams, 2017).

My deliberations about kinship inevitably bring me to perhaps the most imminent philosopher in terms of human-dog relationships, Donna Haraway. She makes strong

reference to 'kin' and 'kinship' ties in her works (Haraway, 2008; Haraway, 2003). In fact her Companion Species manifesto, is a kinship claim, offering 'dog-eaten props and half-trained arguments' for what she considers 'the practices and actors in dog worlds, human and non-human alike, ought to be central concerns of technoscience studies...and dog writing to be a branch of feminist theory" (Haraway, 2003:4-5). Whilst I must elevate her to 'guru' status in the context of this Rhapsody and Refrain, I will expand on why such status should be bestowed upon her. What Haraway attempts through her guise of the dog-human relationship is a post-human and Anthropocene challenge under the insightful application of 'kin' and 'kinship' ideas. She provocatively uses her passion for 'critters' to expose the short-comings and limitations of our human exceptionalism. As Gane, suggests she contests how some thinkers continue to treat 'human agency as something sacred' (Gane and Haraway, 2006). Indeed, her work details her assertion of post-humanism being restrictive and misleading and that we are 'displaced cosmologically in terms of the fiction of man at the center' (Gane and Haraway, 2006: 141). In fact, I do like her humorous portrayal of the Vitruvian dog-but we must note she does this with serious intent, to highlight the issues of post human and non-human tensions, (Haraway, 2008:8).

Haraway also gives little traction to Freud as well as Deleuze and Guattari. I find myself as a clinician and therapist having to reconcile my own tensions with post-humanism and psychoanalysis. In doing so I have 'become' post-structural. However, I do consider that she may have misinterpreted Deleuze and Guattari and taken umbrage at their contempt for dog and cat lovers. I recall feeling a similar sense of dislike, however, what I realise is how they are critical of the 'sentimental infantilization of animals' through their domestication (Bogue, 2015:166). This is a legitimate point and one which perhaps separates Haraway from Deleuze and Guattari in that she states how we 'become-with animals' and this is not the same notion as 'becominganimal'. What this essential difference relates to is the distinction between the actual and the virtual and de-territorialisation and re-territorialisation, with Deleuze and Guattari's 'becoming-animal' characterizing both. Haraway's stance relates to the virtual only in 'becoming other'. Perhaps the arguments and differences between them are arbitrary, as in Deleuze and Guattari's orchid and wasp interspecies symbiosis there is more common ground with Haraway and in seeing both orchid-wasp and human-dog symbiosis merely as relational ontology. The notion of 'being' and

'becoming' is also seen in opposition to one another in childhood studies and developmental theories, and whilst not the main aim of this thesis it is a helpful reflection as to why post-human and post-structural perspectives can become confusing. In agreement with Uprichard, I consider we are actually locked into both states, with the main question being the spatio-temporality of childhood, (Uprichard, 2008). It brings me back to the very idea of kinship which I highlight as a key finding. What appears significant with the children and Ted (whether we consider Dave-Tails-Ted's domestication or not) is that he opens up new and alternative possibilities and modes of existence for the children. If we take the Deleuzo-Guattarian stance that the question is not so much one of an animal being 'wild' or 'domesticated' but that the issue is much more about mutual-becoming. The children's relations with Dave-Tails-Ted in the classroom are inter-species alliances, symbiotic, where I have observed the children avail themselves to Dave-Tails-Ted, and likewise Dave-Tails-Ted avail himself to the children. These are kinship ties and ones which bring the child's body back into sharp focus, both in terms of the private and public spaces they move and dwell. As Valentine asserts, the child's body has been absent and unacknowledged in research, with regard to how they take up and occupy space, (Valentine, 2015). This harks back to the issue of how we view children as either 'Apollonian' (pure and innocent, in need of protection) or 'Dionysian' (evil and corrupt in need of control and regulation), (Jenks, 1996). Clearly the children's relationships with each other and Dave-Tails-Ted demonstrates how they mark out important connections and patterns within the classroom in what Valentine might consider an important 'intimate turn', (Valentine, 2010: 34). What the children have expressed are the favourite spaces they like sharing with Dave-Tails-Ted. These are certainly intimate assemblages, under desks, on floors, sharing chairs, classroom corners and in made up dens (both inside the classroom and outside the classroom).

Comics and the senses

The children's narrative of their relationship with Dave-Tails-Ted in the classroom emerged as a comic book creation. Reading comics is a multi-sensory experience and performance through ocular synaesthesia, (Hague, 2018). As Hague emphasises...

"...it is an extension of the reader into a metaphysical space; a cognitive process through which meaning is *pressed onto* sensory information", (Hague, 2018: 28).

It is perhaps unsurprising to some extent, that this was the preferred chosen medium by the children, having shared their pleasure from reading Marvel comics and cartoon comics of various television characters such as Pokemon, The Simpsons, Scooby Doo, Animals, Rainbow Dash, and The Beano. Within the produced comic the children include photos and images which ultimately invoke the senses and a pattern of repetition in their personal interactions with Dave-Tails-Ted. This is expressed around Ted in a way in which they *show* and *reveal* his affective capacities in several ways, such as the energy he awakens in them, to the happiness the children feel in having him around. These words are highlighted in text insertions and thought/word bubbles. In doing this the children are animating their encounters with Dave-Tails-Ted, showing this to be a whole-body experience and in a parallel process, something which the comic reader can also become affected by.

Seeing Dave-Tails-Ted's fur ruffled, stroked and massaged by the children draws the eye to his softness, form and texture. Their touching of pages and tactile pleasure is also one in which it became re-enacted through reading the comic with their fingers observed to 'trace' the contours of his body as well as other elements on the page. The teacher later reported anecdotally how the comic had become a popular choice in every classroom during reading time. This tactile and sensory aspect of the comic is noteworthy as it enabled touch and feeling through the materiality of expressive lines work and photos, (McCloud, 1993). It could be inferred that Dave-Tails-Ted evoked these tactile pleasures and comforts as well as embodied memories which might have related to odour and smell, (Gibson, 2015). It would have been useful, in hindsight, to have gathered these comments.

Nonetheless, it suggests that as a storytelling medium, the 'comic' is a useful tool with which children engage meaningfully. As it goes beyond visual affect it has been an ideal conduit for both the children and I (as ethnographer) with which we can express and relay our 'tales'. As David Mack asserts very aptly...

"For me, comics are a collaboration between the reader and creator. For me the artwork and the story are not on the physical page. The physical page is just an artefact. It is a navigational device. It is the equivalent of a road map." (Mack, 2005: 89).



The children's comic was produced both digitally and materially. Both mediums have interesting affectual capacities and I offer a distinction which I consider a valid point to raise. The materiality of childhood is something which I discussed in Plateau # 2 and as I have already stated, the completed creation distributed in the school had a notable impact (by being included in the library sections) within all the classrooms. They were colourful and glossy, in keeping with the vibrant and animate tone of the children's narrative. In addition, they had a smooth feel, a sound when the page was turned and a scent and smell of their own which no doubt varied after numerous handlings (the ink smell fading, the scent of the previous reader infusing the pages). In digital format the reader can expand or contract the images by zooming in or out. They can explore visually the pixilated images of dots which diffract the images, in a cutting-apart-together form of diffraction and animation. The reader can engage in a lively motion and movement of the hand by clicking on the mouse to turn the page. But what stands out as very significant is that the sensory aspects of the comic is too personal a 'sense' to be completely codified, they detach readers from the text itself 'by plunging them into memory, nostalgia, and emotional responses

that are very difficult to cue or direct', (Hague, 2018: 141). This concurs with Gibson's emphasis on 'embodied memories' as being a powerful product of reading comics, and as the children have been observed, anecdotally, across the school, they attest to this very phenomenon, (Gibson, 2015). The children's comic has fitted into the schools' social fabric and children's experience and can be considered a further extension of Ted's body, both materially, aesthetically and affectual (sensorial).



Enactive Kinaesthetic Empathy

A considerable finding from ethnographic observations, photographs and children's drawings was that of kinaesthetic empathy. Kinaesthetic empathy is a delicate and intricate concept. Sapir encompassed the non-verbal aspects of its nature some time ago:

"we respond to gestures with an extreme alertness, and one might say, in accordance with an elaborate and secret code that is written nowhere, known to none and understood by all' (Sapir, 1928: 556).

Perhaps the best-known example of kinaesthetic empathy is yawning. As Yoon and Tennie point out, this is a curious 'contagious' phenomenon that 'spreads from one individual to another' (Yoon and Tennie, 2010: e1). They describe this as a non-conscious mimicry when interactions are of good quality and a 'liking' of the other occurs, (Yoon and Tennie, 2010: e2). I have previously described how Deleuze and

Guattari refer to 'doubling', a concept that offers a way to consider how we are affected and can affect one another as we move in space, it is a felt intensity, a vitality affect, a sensation, an internal process of intermixing and doubling of the senses, a 'double-becoming', (Deleuze and Guattari, 1987/2013: 355). Although kinaesthetic empathy has been explored through humans and primates, and the notion of 'theory of mind' (being able to predict another's actions) it is comparatively an under researched phenomenon cross-species, (Yoon and Tennie, 2010; Massen and Gallup, 2017). Shapiro has attempted to shed further light on the issue and in a moving account of how he encountered kinaesthetic empathy with his own dog, Shabka, he highlights its significance in terms of space, in what he calls 'space of place' (Shapiro, 1990:190). For dogs, space can be defined through 'marking' and as territorial space. For humans we have 'personal space'. Shapiro combines these two ideas as dogs and humans we reside and move with one another. In this space, a sense of being is experienced, a bodily sense and we also sense the body of another, thus we are aware kinaesthetically of being together in a space, dwelling together in it, as it were, tuning into one another in what becomes a site of kinaesthetic empathy. This appreciation of each other's bodies spatially means we connect with dogs as social actors and subjects. Therefore, kinaesthetic empathy is important as a method which can be helpful in accessing the subjective life of animals. It is an attempt to understand their language (through human empathy) based upon, social construction, and the personal and individual biographical narrative of Dave-Tails-Ted). It is the 'becoming-withness' described by Tsing, (2017:35). A feeling 'with' – a becoming with, a taking up of and occupying the others perspective. It is a form and an act of knowing (in accordance with Stein's definition of empathy; Stein, 1917/1989). It is a major tool in understanding the sensitivity we can have in humananimal relationships to inform our understanding of them. It avoids anthropomorphism and anthropocentrism.

In picking up and assimilating aspects of the other, this means that each becomes in part the other, producing space that allows for shared agency to emerge, (Lefebvre,1991). It is an enlivening aspect of Dave-Tails-Ted's presence and he clearly moved and animated the children within the classroom, as well as calmed and quietened them.

As Parviainen poignantly asserts:

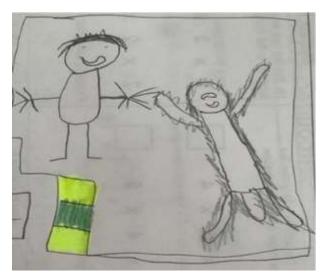
"We may grasp another's living, moving body as another center orientation of the world through our own kinaesthetic sense and body topography. Kinaesthetic empathy seems to have a partial capacity to make sense of others' experiential movements and reciprocally our own body movements. It makes it possible to understand the non-verbal kinetic experiences through which we acquire knowledge of other's bodily movements on the basis of our own typography" (Parviainen, 2003: 151).

What emerged through my rhythmanalysis was my bearing witness to the kinaesthetic empathy between Ted and the children, and indeed myself and Dave-Tails-Ted (see ethnographer pentimento's, Carlyle, 2020 and field note observation 28th January 2018).

In astounding, perceptive and captivating accuracy, the children did drawings and took photographs depicting the act of **kinaesthetic empathy** which evidenced this unfolding phenomenon and fascinating finding of matching one another's body ...









As we can see, the children being in the moment and noticing the detail in these multi-species encounters, where normal conventions of classroom order do not apply, each has the opportunity to relax and re-encounter their self through the other. Thus, kinaesthetic empathy is a crucial finding to the aspects of the meaningful and reciprocal relationships the children formed with Ted. It therefore reiterates the need to consider it as an ongoing concern and important area for further research into human-animal interactions. We need to question the primacy given to language in how we communicate between and across species. As the images show, this level of intimacy and deep sense of connection is one that warrants further recognition and further study. If we gain a sense of ourselves in the world, our own agency and autonomy through animals and others, as self-determination theory supports, then this has great implications for flourishing and well-being, (Ryan and Deci, 2000). In addition, in animating the children's narrative they are identifying what matters to them and their co-being relationships. In child-animal interactions research there has been a tendency to emphasize the developmental views about children's experiences and encounters (such as attachment theory already discussed). Perhaps it is time to imagine alternative narratives in human-animal studies with a more child-orientated (as well as animal-orientated) approach, which is what I have attempted to do in this multi-modal ethnographic ensemble. I will expand upon this further in my discussion of contemporary animism, art and animal in an attempt to re-configure post-humanism.

Correspondence and its common thread with enactive kinaesthetic empathy

The very liveliness of animals, in this instance, Dave-Tails-Ted in the classroom, opened up the affectual capacities and experiences he had with the children. This lively ethnography also resonates with the idea of 'correspondence' put forward by Ingold, and how human artefacts can be situated in an 'non-human' ontology, 'in which human and animal lives...find the essence of sociality' (Ingold, 2013b: 16). Hence, he considers they are indeed entangled and inseparable. Ingold's correspondence and animate life is rather like the nineteenth century philosophy of Henri Bergson (1859-1941) who also influenced the work of Deleuze and Guattari. This kinetic, creative and vital force which they all attest to, has been at the very heart of this thesis-assemblage from the beginning. The fact that the research findings are 'emergent' is unsurprising with use of such an onto-epistemological positioning. This has enabled the body to emerge as a site and vector of knowledge, not just a body to move with but think from and through. In Ingold's text bodies come into correspondence, or 'co-respondence' as I like to consider - a reciprocal and complex correspondence similar in part to kinaesthetic empathy, an attentional 'with-ness', (Ingold, 2016b: 24). It is also akin to Barad's, (2007) concept of intra-action and Deleuze and Guattrai's orchid-wasp mutual becoming, (1987/2013). If I consider Ingold's example of playing the cello and think upon my playing of the harmonica (in scoring the children's rhizome) as a correspondence, or indeed a mode of kinaesthetic empathy, then the harmonica sets up a sound with which I became immersed. Its emergent melodic sound animated the rhythms of relating in the classroom between the children and Dave-Tails-Ted. It materialised the intertwining of bodies and worlds. It indicates how the rhythmanalysis is constantly unfolding and re-emerging, it is never finite or fixed. It will always become something more. Although I am offering my 'findings' in this plateau, it is therefore noteworthy that it is not meant to be considered as a complete entity of what has transpired in the research process. As Vannini succinctly describes the vicissitudes of non-representational ethnography:

"A vitalist ethnography, in short, is an ethnography pulled and pushed by our sense of wonder and awe with a world that is forever escaping, and yet seductively demanding, our comprehension", (Vannini, 2015b: 320).

In true Deleuzo-guattarian fashion, it is something which is an on ongoing trope of overlapping and proliferating rhizomes and lines of flight. It is non-representational, thus a more-than-human, more-than-textual (through creative expressions and techniques) ensemble that harnesses and materialised the affectual, non-conscious, unprogrammed thought. My focus has been on the corporeal entanglements in the classroom, 'embodied in action rather than talk or cognitive attitudes' (Vannini, 2015a: 4). As he asserts:

"it seeks to push limits, ...non-representational work aims to rupture, unsettle, animate, and reverberate rather than report and represent", (Vannini, 2015a: 5).

One of the important distinctions both Ingold and Sheets-Johnson make (when we consider correspondence and choreography of dance) is that there is a difference between embodiment and animation which is significant. Embodiment indicates something inner and inside the body, whereas animation involves both inner and outer kinaesthetic dynamics at play together, (Ingold, 2016b; Sheets-Johnson, 2009). Thus, animation is multi-sensory and materialises as such. Hence, this thesis-assemblage emerged in a multi-modal and multi-sensory way. This has been particularly so in respect of animating and understanding how human(child) and animal (dog) bodies become-with one another. As ethnographer I also became-with the children and Ted. As Nabias accurately states:

"The artist is the one that lives the affect, the one that works with the affect and lives in the affect, the point of indistinctness between man and the animal or the whole world, the zone of indiscernibility between words and things. The artist is the one that, for example as in Melville, become-ocean (Moby-Dick), or becomes-mineral (Bartleby)" (Nabias, no date: 5-6).

Contemporary animism, art and animals —deconstructing post-humanism In expanding critical theory, it has been clear that the terminology and language used when referring to human-animal interactions is contentious and varied. As Braidotti has reflected the thorny issue around language and terminology relates to

the notion of 'species-ism', (2010: 71). I pause here to consider that the very language we actually use, such as 'post-humanism' continues to separate us (animals and humans) from one another, therefore language (ironically) is important for humanities and a shift in how we 'other' that which is different to us (humans in the absolute sense of the term - the white, middle class, male). As Braidotti asserts herself that 'species-ism' should be moved away from towards a zoe-egalitatrianism between humans and animals, and an appreciation of (Braidotti, 2018: 71) what bodies can do. I am in complete agreement; however, I do not think she goes far enough, and I have previously touched upon this in Plateau # 2. The terminology of calling this 'post-human' still sits uncomfortably with me. There are several issues here, and I take Spinoza and Deleuze as my main points of reference. The idea of life and life force they discuss calls for a monism (as does Braidotti, 2018), but post-humanism seems entangled with species-ism and the nature/culture divide, thus blurring the very issues it seek to correct. I make this rather radical claim in that post-humanism views the human-animal relationship fundamentally from a humanist ontology, whereas Rossini, (2006) and Wolfe, (2003) indicate a need to encompass a zoontology (alongside Haraway's, 2003 Companion Species Manifesto) to draw upon humans both sameness and difference with animals outside human bounds. I have come to such a point through my ethical stance of recognising Dave-Tails-Ted as a social actor participating in the research as much as the children, the teacher and I (ethnographer-participant). He is not an object but a subject, with vitality, sentience and a voice. Perhaps in taking a visual, sensory, diffractive, rhizomatic and non-representational (multi-modal) approach to ethnography has brought me to consider how 'we' (participants in research) as 'humans' in the research could be 'decentered' by Dave-Tails-Ted. I have often wondered what Ted was 'thinking' and indeed what he would say if he did command English as his first language, alongside contemplating Despret's apt quote 'what would animals say if we asked the right questions?' (Despret, 2003). Well, I think Ted might say/vocalise we need a fundamental change in language and terminology amongst us humans! Perhaps I am in a parallel process with Dave-Tails-Ted in that my very 'identity' as a researcher is in question and where I align in terms of theory as I have roamed across and intersected various disciplines in this thesis-assemblage from children's geographies, to developmental psychology, education to well-being and flourishing. I cannot find a particular precise 'fit' with any of them and have hence turned towards 'anthrozoology', which equally

leaves me pondering as I am not an anthropologist and the distinction between anthropology and ethnography is one which Ingold takes up and terms 'ethnography' an oxymoron. He exhorts that 'participant observation' should be the operational language when undertaking fieldwork, as this best describes the 'intimate coupling' of the observer and the observed, in educational correspondence, learning from one another, (Ingold, 2014: 387). I do not particularly want to 'fit' anywhere, I want to retain the essence of Deleuzian philosophy and continue to wayfare and roam across language and disciplines in my multiplicity. One thing, however, is left in my egalitarian quest for Ted to be heard, at least in part through this process, and that is through referring to this thesis-assemblage as our 'zoontologies', (zoon is Greek for 'animal'). This distinction might seem arbitrary but as Ingold has shown with his example of ethnography and anthropology being separated, the term post-humanism has become overused and needs to return to a new premise, but perhaps not the pre-human positioning as eloquently articulated by Colebrook, (2015). My ontology is an ontology of life, a zoontology. Life understood through observation, an attempt to see life beyond the human exceptionalism. What I have learned is that child-dog (human-animal) relations can only be understood if we grasp and decipher the limitations of the human being. We need to consider as Bradotti says that we are an 'extended self, on a nature-culture continuum, (2010: 65). This indeed resonates with how Ted became an extended part of all of us in the classroom. We became entangled and entwined in mutual availability to one another, becoming transformed as something more. For me, that something more was a humbling of myself as a member of the human species, seeing life in its non-human and wonderous aspects.

A zoontology is therefore clearly not an ontology of the human but one that takes the question and ontology of the animal seriously, (Rossini, 2006). As this thesis-assemblage has shown, it is the encounters we have with Dave-Tails-Ted which are material and multiple embodiments of us as co-participants as opposed to an 'anthro-ontological' questioning about the nature of Man. It is about philosophy as a *life*, (Deleuze and Guattari, 1994).

The intersection with art is a fascinating one in which Wolfe, (2003) draws attention to the powerful ways in which animals occupy affective spaces. In his collection of

zoontologies he provokes thinking of the animal through contemporary cultural practices, such as art as one example. Among various examples of animals and painting, perhaps the most endearing and distinctive is the one in which the French painter, Tessarolo is working with a chimpanzee called Kunda, (Baker, 2003). During painting sessions together Tessarolo describes how there were times Kunda would like his contribution to her picture, and times when she would rub them over with her hand. When they had both finished painting, Tessarolo would sign his name and Kunda would print her hand on the canvas. These moments of 'with-ness' depict how Kunda could interact with the artwork and also mark it with her own hand.

As Baker states:

"it is the mark of the hand on the painting as a point of exchange, that, for the present, best records the loose creative alliance of animal and artist. It may not be entirely clear what is exchanged between the human and the animal in these instances, but the politics and poetics of that exchange call urgently for further exploration" (Baker, 2003: 161).

In this enchanting example I am aware once more of the significance of the hand, both human and non-human. My thesis-assemblage features a lot of the children's hands and Dave-Tails-Ted's paws, in various contexts, which I have already animated and discussed. If Aristotle sees man as having an important tool and instrument in the hand, and Heidegger considered a hand to be a 'hand of thought' then the use of the hand (claw or paw) in animals must raise questions of Dave-Tails-Ted's agency and dog cognition, (Horowitz, 2019). I am reminded of my first creative workshop with the children and Ted in the classroom and the pendulum painting activity they took part in. Despite my laying protective plastic sheeting on the classroom floor, the teacher became quite concerned that the activity was one in which Dave-Tails-Ted also wanted to interact. I was quite happy for him to place his paw prints on the large paper roll, but the teacher thought we should not let him make a mess as the cleaners would not be pleased. I still wonder about this event and what Ted's contribution would have looked like

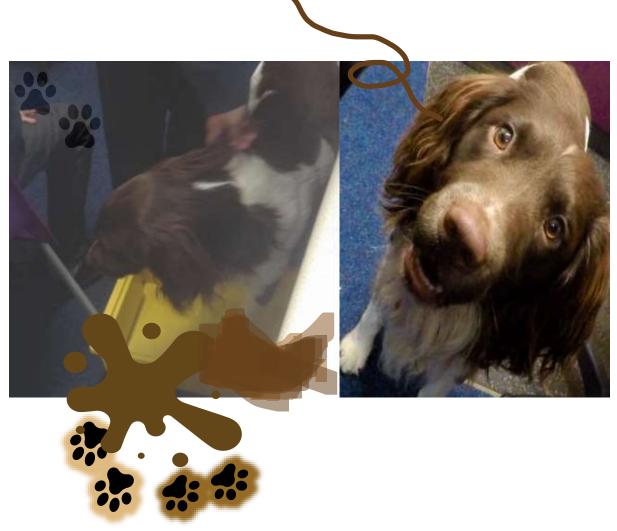




Image reproduced by kind permission of Diane Morren

What Berkoff helps us do is take a dog-centric view of the world and one in which dog cognition, dog emotion and dog reason are acknowledged, (Berkoff, 2007). What Berkoff has also highlighted, with which this thesis-assemblage also corresponds, is that children who have experienced trauma or abuse, particularly sexual abuse- animals, (especially dogs), have been said to be supportive. If we take this issue in the context of my research findings regarding touch and safe touch, then Dave-Tails-Ted's potential affordances in the classroom extend to ameliorating life transitions (such as divorce) and loss (family bereavement). This aspect of Dave-Tails-Ted's support cannot be overstated. As Berkoff states:

"We need animals in our lives just as we need air to breath. We live in a wounded world...without close and reciprocal relationships with animals we're alienated from the rich, diverse, and magnificent world in which we live" (Berkoff, 2007: 23-24).

The children in this research have lived and breathed with Dave-Tails-Ted in their classroom, they have a compelling narrative and animation of their feelings of companionship, support, kinship and connection to Ted. They have expressed the very affordance of support that Berkoff has highlighted, (Berkoff, 2007). In actual fact, they have engaged in a rich and different kind of encounter and experience with Dave-Tails-Ted as a non-human. This is captured aptly by Merewether, as 'enchanted animism', (Merewether, 2019: 3). In bearing witness to these encounters and events, I have joined them in their 'enchanted animism'- their awe and wonder of the world and its vitality and energy. This enchantment with the world and non-humans (Dvae-Tails-Ted as an example) forms precisely what Barad terms an 'ontoe-pistemological framework, which brings humans and non-humans together, thus there is no dualism and perception of being 'higher' or 'lower' in terms of viewing our relationships with animals as symmetrical, (Barad, 2007: 43).

Although animism is seen in something of a negative way, 'new' or 'contemporary' animism has shifted these negative connotations beyond ideas and considerations of animism being related to the 'primitive', 'spiritual' and 'religion', (Harvey, 2006). It is no coincidence that one of my very first papers and 'lines of flight' at the start of my

thesis attempted to tackle the thorny issue of vitalism, (Carlyle, 2018). So here I connect back to the beginning rhizomatically, as it were, in 'bearing witness' to the relevance of holding an ontoepistomological position. What I now suggest is that this extends even further and propose a 'ZOOntology' to more aptly refer to this journey and thesis-assemblage. I cannot claim that I am fully aware of Dave-Tails-Ted's different being in the world, his *umwelten*, but what I can claim is that a shift towards 'zoontologies' is a way forward for future animal-human research. In a similar vein to considering Dave-Tails-Ted's umwelt, vanDooren and Rose terms this 'ethea' (ways of life and being in the world) and advocates a 'lively ethnography' called 'ecological animism', (vanDooren and Rose, 2016: 81). To engage a 'lively ethnography', one must first be curious about stories and enact these stories in order that we 'seize' others to be curious, (vanDoonren and Rose, 2016: 89; Haraway, 2008). Thus, paying attention to my 'arts of noticing' like Tsing, and bearing witness to multi-species encounters, my own awakening can be considered through immersion in curiosity and in the field, (Tsing 2015: 42). Again, I refer to the beginning of this thesis-assemblage and the enchanting research by Boyd in her painting with horses, (Boyd, 2015) and how this seemed wonderful but beyond my comprehension as to why she should do such a thing. But I was curious. I now realise that this is indeed a dynamic zoontology and one in which future research into animal-human studies can benefit. My delving into the *curious* phenomenon of kinaesthetic empathy also bears testament to this. How we move and engage together is a never-ending 'vector of entanglements', everything is an ongoing, unfolding, co-emergent relationship and we learn who we are as well as who the 'other' is, (Carlyle, 2018).

Coda



In thinking rhizomatically, I have been enabled to experiment and playfully see the world differently, interact differently, appreciate its sensuous knowledge and explore what this potentially opens up to scholars and theory. I have gained a sensuous knowledge. As Salami, so eloquently says:

"Sensuous knowledge is thus a poetic approach; it is the marriage of emotional intelligence with intellectual skill. It is perceiving knowledge as a living, breathing entity rather than a packaged product to passively consume. It is encountering knowledge as a partner rather than a servant – or as a lord, for that matter. It means treating knowledge as precious, so that it can hone you into an embodiment of its merit. Sensuous Knowledge is knowledge that infuses the mind and body with aliveness leaving its impact like the wake of perfume. It is knowledge that is pliable and not hard as rocks. Sensuous Knowledge means pursuing knowledge for elevation and progress rather than out of an appetite for power', (Salami, 2020: 15).

Hence, I revisit my original research questions and consider what my thesis **Coda** is (concluding passage to this exposition) and its contribution to knowledge. These questions have 'morphed' into a final coda that challenges current ways of seeing relationships, beyond contemporary attachment theory to entanglements and affect theory **(Q 1 & Q 2)**.

- 1. What kinds of relationships do children form with dogs in schools and class-rooms?
- 2. How do children interact with dogs in schools and classrooms?
- 3. What do children understand and say about their interactions with dogs in schools and classrooms?
- 4. What are the affective mechanisms at play in child-dog encounters?
- 5. How can a dog communicate their experiences?

In this 'contact zone' I put forward that the children's (and for that matter, Dave-Tails-Ted's) positionality of enchanted animism should be one which we all attempt to embrace. In doing so we expand the ethics of practice and its horizons. As we learn about the world, we become *with* the world. As Nan Shepherd says in her appreciation of the Cairngorm mountains... "As I watch, it arches its back, and each layer of the landscape bristles," - and we are not alone in the world (1977/2014: 11). The possibilities are endless, as the children's narrative and comic re-animation reveals, we *are* home. That *home* is our embodied connection, our diverse and multi-variant connections in the world and to one another (Q 3).

This thesis-assemblage has explored and experimented with scoring (mapping) child-dog relationships and entanglements in the classroom. It animates a 'nomadic'

pedagogy in which Dave-Tails-Ted affords moments of resistance from the educational system and 'pastoral power' that regulates spaces through the classroom teacher, (Cole, 2011: 83). By considering Dave-Tails-Ted as 'pedadog' we can see how he facilitates the children's agency and how they have moments of free expression and nonconformity, (see also Young and bone, 2020). Dave-Tails-Ted also demonstrates how he supports the children to regulate stress and fear in how he 'avails' himself to the children, picking up on cues, such as an outstretched hand, then sitting alongside them (Despret, 2012), (Q 4). In concordance with the research questions and what kinds of relationships children have with dogs in classrooms and schools, and how they interact with one another, I have shown how these questions have 'morphed' even further to illuminate and materialize both canine and child experiences- their kinship, companionship and intimacy through particular attention to the nuanced and intricate mechanisms of affective experiences (through touch, vision, and sound). This was enabled through careful consideration of the patterns and rhythms involved in relating (its temporality and spatiality) which attuned me to the children's and Dave-Tails-Ted's 'dances of reciprocity' and the 'musicality' of their complex intra-actions (Stern, 1998, 2010; Malloch and Trevarthern, 2009) (Q 2). Clearly, these encounters are shown to be significant to childhood well-being and learning through a sensory pedagogy (Q 3). Such encounters afford various benefits to child and dog wellbeing in their becoming a social assemblage. The further expansion of thinking towards a relational ontology that includes animals (in this instance, Dave-Tails-Ted) and non-human entities (such as material objects) in classrooms is therefore warranted.

The data has highlighted and emitted different questions in relation to the question about how animals communicate their experiences and how we can include animal 'voices' in research by attuning to their particular umwelt (Q 4). This thesis-assemblage has taken a first step towards including an animals 'voice' through seeing the potential in their asemic marking and non-linguistic means of communication. This was evident through a combination of the researcher's direct observation, being witness to his encounters and from video footage from the GoPro micro camera, which was attached to Dave-Tails-Ted's harness, enabling a visual animation of tracking his precise movements within in the classroom space. In addition, the sensory nature

of both animal and human experience has much to offer in terms of a deeper understanding of relationships. The contribution of this thesis has therefore potential to support a movement towards an empathic ethnographic understanding of the intricate and intimate human-animal connections. It is a mindful exploration of the important issue of not seeing Dave-Tails-Ted as a 'docile body' but as one which shifts from disciplinary spaces to animal-child entanglements of autonomy and self-determination, attributes imperative to wellbeing, (Ryan and Deci, 2000). As Fairchild also asserts, we can explore leadership and assemblages through 'taking a more-than-human view of relations between human and non-human bodies as a distributed subjectivity which reworks notions of solely human agency" (Fairchild, 2019: 53).

This new knowledge contributes to the current multi-disciplinary fields in childhood studies, anthrozoology, psychology, sociology, health and life sciences. It illuminates the potential of child-dog interactions in a particular context (school and classroom) that takes account of affective emotions and embodied processes.

This ethnographic ensemble can be considered as a way of exemplifying and experimenting with creative approaches for greater inclusivity of animals within research. It advocates a 'zoontology' to challenge the human-centrism of research in proposing radical steps towards questioning what animals can do, and our means of understanding their valuable contribution in the lives of children.

Encore

Often in the midst of my endeavours Something ups and says

"Enough of words,

"let's meet the world", (Ingold, 2021: 199)



Nexus point: considering the Anthropocene – Ted and the children are exploring a 'common world pedagogy of multispecies well-being' (Taylor & Pacini-Ketchabaw, 2015).









APPENDICIES

APPENDICIES

Table Data Generation: Phase 1 & 2

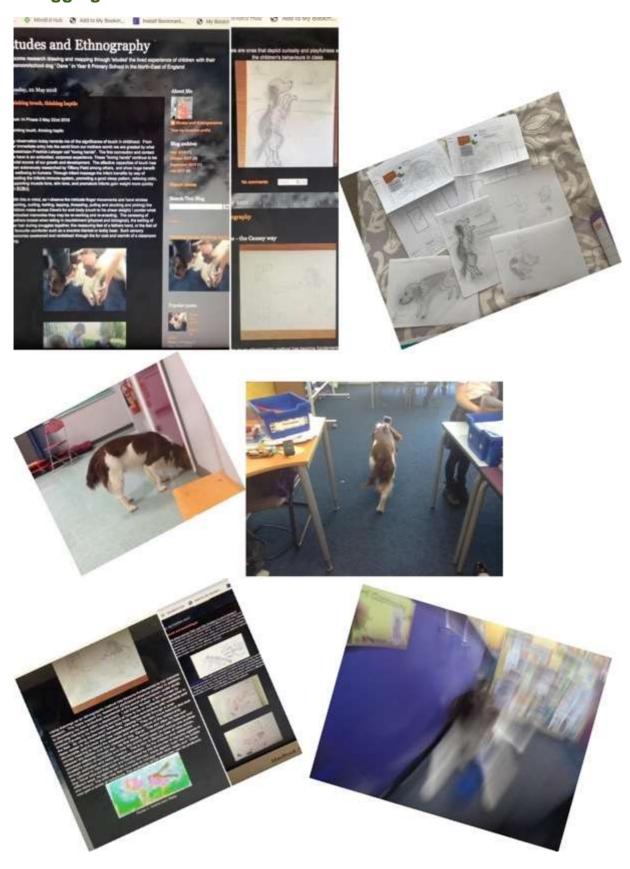
Week (observation number)	Etudes (Eth- nographer sketches)	GoPro: Video Dog (har- ness-back mount)	GoPro: Video Child (wrist)	GoPro: Photos Children	GoPro: Photos Ethnographer	Workshops	Observations outside Y6 & Y4 classroom - (Y2 & Y3, in the garden, in school hall)
1 (25/4/2017) Year 6	1 +mapping	-	-				
2	2	-	-	-	4		
3	3	-	-	-			1 Y2
4	5	-	-	-	2		
5	2 +mapping	-	-	-	-		
6	-	10 mins (test)	-	-	-	P #1 Pendu- lum painting	
7	-	2.11	-	15	-	P #2 Craft work	
8	1	-	-	28	-		1 Y2
9	-	-	-	37	14		
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41 x 2.5 hours WEEKS OBSERVATION = 102.5 hours

Blogging and etudes





Professor Dianne Ford, BSc, PhD, FRSB

Executive Dean, Health and Life Sciences

This matter is being dealt with by:

Dr Maria-Ines Martinez

Social work ethics coordinator for and PGR, and member of the Faculty Staff,

Research Ethics Review Panel. Faculty of Health and Life Sciences

Northumbria University
Newcastle upon Tyne
NE1 8ST, UK

E: maria.martinez@northumbria.ac.uk

W: northumbria.ac.uk

Dear Donna Carlyle

Faculty of Health and Life Sciences Research Ethics Committee

Submission code: n/a. Approval date: 20/03/2017

Title: GROWING UP WITH SCHOOL DOG 'TED'- AN ETHNOGRAPHIC STUDY

Following independent peer review of the above proposal, I am pleased to inform you that Faculty approval has been granted on the basis of this proposal and subject to compliance with the University policies on ethics and consent and any other policies applicable to your individual research. You should also have recent Disclosure & Barring Service (DBS) if your research involves working with children and/or vulnerable adults.

The University's Policies and Procedures are available on the ELP; Organisation name: HLS0002:

Research Ethics and Governance

All researchers must also notify this office of the following:

- · Any significant changes to the study design, by submitting an 'Ethics Amendment Form'
- Any incidents which have an adverse effect on participants, researchers or study outcomes, by submitting an 'Ethical incident Form'
- Any suspension or abandonment of the study;

We wish you well in your research endeavours.

Yours sincerely

Maria-Ines Martinez

Professor Andrew Wathey

Vice-Chancellor and Chief Executive



Northumbria University is the trading name of the University of Northumbria at Newcastle

Faculty of Health & Life Sciences

Study Title: Growing up with school dog 'Ted'

Researcher: Donna Carlyle

Children's Information Sheet 1 of 3

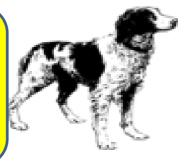
What is Research?

Research is a way we try to find out the answers to questions



Why is this project being done?

This research is being done to look at how you and school dog 'Ted' get along



Who is being asked to take part?

You and your classroom friends are being asked to take part because 'Ted' spends time in

the classroom with you all



Do I need to take part?

No, you don't.

It is your choice whether you take part and you can always change your mind. You don't have to give any reason. It is **YOUR** choice

Study Title: Growing up with school dog 'Ted'

Researcher: Donna Carlyle

Children's Information Sheet 2 of 3

When will the project happen?

Once we have checked that you and your parents are happy to take part then you and your parents can ask any questions you have



You can also look at and handle the cameras the researcher will use



If there is anything that upsets you can talk to your parents or the researcher

Will anything about the research upset me?

The study is safe and you can stop the camera recording at anytime you want



Will my information be kept private?

All your information will be kept private. We will only tell your parents

Study Title: Growing up with school dog 'Ted'

Researcher: Donna Carlyle

Children's Information Sheet 3 of 3

What happens when the project stops?

The project will be talked about and written down but no one will know that you took part



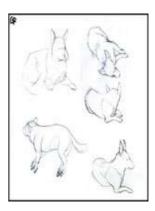
Will the research help me?

The project will not help right now. But it will help us to know more about how children and school dogs get along in class together



How will the research be done?

- Ted will wear a very small camera on his harness so we can see where he moves around
- A camera will also be placed in your classroom
- The researcher will sometimes sketch and draw or take notes during observations of you and Ted



How long will the research take?

One day a week for a whole school year





Faculty of Health & Life Sciences

Study Title: Growing up with school dog 'Ted'-An Ethnographic study

Investigator: Donna Carlyle

Participant Information Sheet (Parents)

Your child is being invited to take part in this research study. Before you decide if you would like your child to take part it is important for you to read this leaflet so you understand why the study is being carried out and what it will involve.

Reading this leaflet, discussing it with others or asking any questions you might have will help you decide whether or not you would like to take part.

What is the Purpose of the Study?

Recent research has indicated that the presence of a dog in a school classroom can be beneficial to children in several ways but the exact nature and mechanism of this are not fully understood.

Some of the issues has prompted the following questions:

- What kind of relationships do children have with dogs?
- How do children get along with dogs in the classroom?
- What do children understand and say about their interactions with dogs?

Why have I been invited?

Your child is in the classroom where Ted is based. This is an ideal opportunity to explore how they 'grow up' together.

Does my child have to take part?

No. It is up to you whether you are happy for your child to take part. I am giving you this information sheet to help you decide. Your child will also be involved in making the decision. They will be given information about the study in a child-friendly way. It may be that

you are happy for your child to take part, but your child would rather not. This decision will be accepted without question. Your child can stop being involved in the study at any time.

What will happen if my child takes part?

After you have signed the consent form your child will be asked if they would like to take part and they will be provided with their own information sheet to tell them more about the study. The researcher will be spending time with the children in class one day per week for a period of 12 months. This is so she can gain a detailed understanding of how children and dogs interact and relate to one another. Through observations (which may include drawings and sketches) the researcher with gather lots of information to describe what is taking place. The researcher will also be participating in everyday school activities along-side the children. Small groups of children will be asked to participate in a weekly task which involves draw and mapping their favourite spaces in class and the spaces they share with Ted. This will last no more than 20 minutes. The research will take place in a familiar school space such as the library or in their classroom.

With your permission, the researcher will video-record observation and group activity to make sure she remembers everything the children talk about. The children will be given the chance to become familiar with the recording equipment and ask questions before the activity. The viewing of this visual recording will be limited to the children and teachers of <____> school, 3 professional researchers from Northumbria University (Dr. Ian Robson, Dr Lesley Gallacher and Associate Professor Deborah James). It is important for other people to view the video for 2 reasons: so the outcome of the research is not grounded in only one person's interpretation and so that the children's voices are truly heard. After all, we would like children's views to have a positive impact on teaching and learning in schools. Additionally, they may help develop services for children within educational settings. These people will not be given a copy of the video - only the researcher will have a copy of the video files.

As an alternative to video, the researcher also has voice-recording equipment. If you would prefer your child to be voice recorded rather than videoed, you can tick this option on the consent form.

After the study

To check that the researcher has understood the children's ideas, she may ask to chat with the children again to explain what she thinks she has learnt from them. The researcher might play the video and voice recording back to the children as part of this process. The children will then be given the opportunity to say whether the researcher has understood their conversations correctly.

After the study has been completed the researcher will give you a sheet explaining the nature of the research, how you can find out about the results, and how you can withdraw your child's data if you wish. General feedback relating to the overall outcomes of the study will be provided; individual feedback on specific children will not be given.

What are the possible disadvantages of taking part?

The project will observe the interactions the children have with school dog 'Ted'. This is perhaps something your child will not have thought about much before and though unlikely, it might generate some feelings of apprehension. The researcher is a health professional and will be sensitive to the children's responses during observations and recordings. They do not have to speak in the task activities if they don't want to. Encouraging children to be open about their thoughts and feelings might help children understand the relationships

important to them. The researcher will work very closely with the class teacher to make it a helpful, positive experience.

What are the possible benefits of taking part?

Your child will contribute towards developing a better understanding of the relationships children have with school dogs. The researcher of this project values children's opinions highly. She believes that children's ideas can have a positive impact on education and services if children are given the chance to be heard. Children also have the right to take part in research and can feel empowered when doing so.

Will my child taking part in this study be kept confidential and anonymous?

Yes. Your child's name will not be written on any of the data we collect. Your child's name will not be written on the recorded observations and they will not be identifiable, or on the typed-up versions of their discussions. His/her name will not appear in any reports or documents resulting from this study. The consent form you have signed will be stored separately from your other data. The data collected from your child in this study will be confidential.

How will my data be stored?

Children's drawings, the typed-up versions of their conversations and your consent forms will be kept in locked storage. All electronic data including the video recordings will be stored on the University U drive, which is password protected, and accessible only to Donna Carlyle. All data will be stored in accordance with University guidelines and the Data Protection Act (1998).

What will happen to the results of the study?

The general findings will be written up in the researcher's final project. These findings may also be reported in a research journal or presented at a research conference. However the data will never include children's names. We can provide you with a summary of the findings from the study if you email the researcher at the address listed below.

Who is organising and funding the study?

The study has been organised and funded by Northumbria University.

Who has reviewed this study?

Before this study could begin, permissions were obtained from Northumbria University.

Contact for further information:

donna.carlyle@northumbria.ac.uk ian.robson@northumbria.ac.uk

Name of another person who can provide independent information or advice about the project

mick.hill@northumbria.ac.uk

References

Abram, D. (1997) The Spell of the Sensuous: Perception and Language in a More-Than-Human World, New York: Vintage Books.

Abramson, C. M, Joslyn, J., Rendle, K. A., Garrett, S. B. and Dohan, D. (2017) The promises of computational ethnography: Improving transparency, replicability, and validity for realist approaches to ethnographic analysis, *Ethnography*, 1-31.

Ahmed, M. (2020) Strong Bonds: Child-animal Relationships in Comics, ACME Collection, Liege: University Press of Liege.

Adams, C. (1994) Bringing Peace Home: A Feminist Philosophical Perspective on the Abuse of Women, Children and Pet Animals, 9(2), *Hypatia*, 63-84.

Alhadeff-Jones, M. (2019) Beyond space and time-Conceiving the rhythmic configurations of adult education through Lefebvre's rhythmanalysis, *ZfW*, 42:165-181.

Allen, K., Shykoff, B. E., and Izzo, J. L. (2001) Pet ownership, but not ace inhibitor therapy, blunts home blood pressure responses to mental stress. *Hypertension, 38*, 319-324.

Allen, K. M., Blascovich, J., Tomaka, J. and Kelsy, R. M. (1991) Presence of human friends and pet dogs as moderators of autonomic responses to stress in women, *Journal of Personality and Social Psychology*, 61, 582-589.

Allison, A. (2006) *Millennial Monsters: Japanese Toys and the Global Imagination,* London: University of California Press.

Alsobrook, L. (2017) The Title of This Paper Is OOO \.∵Ψ□ On Asemic Writing and the Absence of Meaning, *Journal of Arts and Humanities*, 4(2), 1-9.

Anderson, K. L. and Olson, M.R. (2006) The value of a dog in a classroom of children with severe emotional disorders. *Anthrozoos*, *19*(1), 35-49.

Anderson, B. and Harrison, P. (2016) *Taking-Place: Non-Representational Theories and Geography*, London and New York: Routledge.

Anderson, B. (2009) Affective Atmospheres. *Emotion, Space and Society*, 2, 77-81.

Anderson, B. (2006) Becoming and being hopeful: towards a theory of affect. *Environment and Planning D: Society and Space*, 24, 733-752.

Anderson, B. (2004) Time-stilled space-slowed: how boredom matters, *Geoform*, 35, 739-754.

Archer, J. (1997) Why do people love their pets? *Evolution and Human Behavior*, 18(4), 237-259.

Aristotle. (2001) (c. 300 BC) *On the Parts of Animals,* translated by J. G. Lennox, Oxford: Clarendon Press.

Aries, P. (1962) Centuries of Childhood. Harmondsworth: Penguin.

Ash, J. (2013) Rethinking affective atmospheres: Technology, perturbation and space times of the non-human. *Geoforum*, 49, 20-28.

Ash, J. (2014) Affective Transmission: Encounter, Force and Perturbation, September 30, 2014, Theory and Culture Society, Available at: https://www.theoryculturesociety.org/james-ash-on-affective-transmission/ (Accessed 22nd May 2017).

Ash, J. (2017) Visceral methodologies, bodily style and the non-human, *Geoforum* 82, 2006–07.

Ash, J. and Gallacher, L. (2015) Chapter 5,69-86, Becoming Attuned: Objects, Affects, and Embodied Methodology. In: Perry, M. and Medina, C.L. (2015) *Methodologies of Embodiment: Inscribing Bodies in Qualitative Research*. New York and London: Routledge.

Bains, P. (2011) Assent for children's participation in research is incoherent and wrong, *Archives of Disease in Childhood*, 96, 960-962.

Balbernie, R. (2001) Circuits and circumstances: The neurobiological consequences of early relationship experiences and how they shape later behaviour. *Journal of Child Psychotherapy* 27(3), 237–255.

Bailey, C.J. (2017) *Investigating the Lived Experience of an After-School Minecraft Club*, unpublished PhD thesis, Sheffield Hallam University. Available at: http://shura.shu.ac.uk/15872/ (Accessed: 4th June 2017).

Bailey, C. J. (2020) Visualizing lived experience: mapping the soundscape of an after-school Minecraft club, *Visual Communication*, Vol. 0(0), 1-18.

Balluerka, N., Muela, A., Amiano, N. and Caldentey, M. A. (2014) Influence of animal-assisted therapy (AAT) on the attachment representations of youth in residential care, *Children and Youth Services Review*, 42, 103-109.

Barad, K. (2014) Diffracting Diffraction: Cutting Together-Apart, *Parallax*, 20(3), 168-187.

Barad, K. (2007) Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning, Durham and London: Duke University Press.

Baron-Cohen, S. (1997) *Mindblindness: An essay on Autism and Theory of Mind,* Cambridge, Massachusetts, London, England: The MIT Press.

Barrett, L. F., Mesquita, B., Ochsner, K. N., and Gross, J. J. (2007) The Experience of Emotion, *Annu Rev Psychol*, 58, 373-403.

Bates, T. (2015) Cutting together-apart the mould, *Antennae*, 32, 44-66.

Bergson, H. (1950) *Time and Free Will: An Essay on the Immediate Data of Consciousness,* (trans. F.L. Pogson), London: George Allen and Unwin Ltd. Available at: https://chilonas.files.wordpress.com (Accessed December 2016).

Bergson, H. (2003) *Creative Evolution*, (trans.by Arthur Mitchell), Mineloa, New York: Dover Publications Inc.

Beetz, A., Julius, H., Turner, D. and Kotrschal, K. (2012) Effects of social support by a dog on stress modulation in male children with insecure attachment. *Frontiers in Psychology*, *3*, 1-9. doi:10.3389/fpsyg.2012.0035

Belsky, J. (1984) The determinants of parenting. A process model. *Child Development*, 55, 83-96.

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

Berger, J. (1980) About Looking. New York: Pantheon Books.

Bergroth, E., Remes, S., Pekkanen, L., Kauppila, T., Buchele, G. and Keksi-Nisula, L. (2012) Respiratory tract illness during the first year of life: effect of dog and cat contacts, *Pediatrics*, 130(2), 211-220.

Bergson, H. (2002) In: Lee, R., Castree, N., Kitchin, R., Lawson, V., Passi, A., Philo, C., Radcliffe, S. Roberts, S.M., and Withers, C.W.J. (2014) *The Sage Handbook of Human Geography: Volume 1.* London.

Berkoff, M. (2007) *The Emotional Lives of Animals,* California, USA: New World Library.

Berkoff, M. (2016) Forward, xi, In: Rice, S. and Rud, A. G. (2016) *The Educational Significance of Human and Non-Human Animal Interactions*, London: Palgrave Macmillan.

Berlant, L. (2001) Love, a queer feeling. In: Dean, T. and Lane, C. (eds), *Homosexuality and psychoanalysis*, 432-452, Chicago: University of Chicago Press.

Berlant, L. (2011) Cruel optimism, Durham: Duke University Press.

Berlant, L. (2000) *Intimacy*, Chicago: University of Chicago Press.

Berry, A., Borgi, M., Francia, N., Alleva, E. and Cirulli, F. (2013). Use of Assistance and Therapy Dogs for Children with Autism Spectrum Disorders: A Critical Review of the Current Evidence. *Journal of Alternative and Complementary Medicine*, 19(2), 73-80.

Bloch, M. (1992) *Prey into Hunter: The Politics of Religious Experience*, Cambridge: Cambridge University Press.

Bogue, R. (2015) The Companion Cyborg: Technics and Domestication, Chapter 9, 163 - 179, In: Roffe, J. and Stark, H. (2015) *Deleuze and the Non/Human*, Hampshire, UK, New York, USA: Palgrave Macmillan.

Bogue, R. (no date) Lecture: *Deleuze, Guattari and The Musical Refrain III*. Available at http://www.youtube.NXku-SRLHOk (Accessed 26 June 2020).

Bogue, R. (2014) Scoring the Rhizome: Bussotti's Musical Diagram, *Deleuze and Guattari Studies*, 8(4), 470-490.

Bohm, D. (1952) In: Barad, K. (2007) *Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning*, Durham and London: Duke University Press.

Bohme, G. (2017) The aesthetics of atmosphere, Abingdon, UK: Routledge.

Bondi, L. (2005) Making connections and thinking through emotions: between geography and psychotherapy, *Transactions of the Institute of British Geographers*, *30*, 433-448.

Bowen, M. (1978) Family therapy in clinical practice, New York: Jason Aronson Inc.

Bowlby, J. (1969) Attachment and Loss Volume 1 Attachment New York: Basic books.

Bowlby, J. (1973), *Attachment and Loss Volume 2 Separation, Anxiety and Anger_*New York: Basic Books.

Bowlby, J. (1988) A Secure Base. Clinical Applications of Attachment Theory. London: Routledge,1992.

Boyd, M. J. (2015). *Human-Horse Entanglements: new materialisms and non-human perspectives in art.* (PhD Doctorate). University of Sydney. Retrieved from http://hdl.handle.net/2123/14352

Bradshaw, J. (2017) *The Animals Among Us: The new science of anthrozoology*. London: Penguin.

Braidotti, R. (2013) *The Posthuman*. Cambridge: Polity Press.

Brennan, T. (2004) *The Transmission of Affect*. Ithaca and London: Cornell University Press.

Brembeck, H. (2008) Inscribing Nordic Childhoods at McDonalds, 269-281. In: Gutman, M and de Coninck-Smith, N. (eds.) *Designing Modern Childhoods: History, Space and the Material Culture of Childhood,* New Brunswick, NJ.: Rutgers University Press.

Bronfenbrenner, U. and Evans, G. W. (2000), Developmental Science in the 21st Century: Emerging Questions, Theoretical Models, Research Designs and Empirical Findings, *Social Development*, 9(1), 115-125.

Brookshaw, S. (2009) The Material Culture of Children and Childhood: Understanding Childhood Objects in the Museum Context. *Journal of Material Culture*, 14(3), 365-383.

Brown, S. E. (2007) Companion Animals as Selfobjects, Anthrozoos, 20(4), 329-343.

Brown, S. W. and Strong, V. (2001) The use of seizure-alert dogs, *Seizure*, 10(1), 39-41.

Buchanan, I. (2015) Assemblage Theory and Its Discontents, *Deleuze Studies*, 9(3), 382-392.

Buchanan, B. (2008) *Onto-Ethologies: The Animal Environments of Uexkull, Heidegger, Merleau-Ponty and Deleuze,* New York: State University of New York Press.

Buckingham, D. (2000) After the Death of Childhood: Growing Up in the Age of Electronic Media, Cambridge: Polity Press.

Burman, E. (2007) *Deconstructing developmental psychology, 2nd ed.* London: Routledge.

Burrows, K. E., Adams, C. L. and Millman, S. T. (2008) Factors Affecting Behavior and Welfare of Service Dogs for Children with Autism Spectrum Disorder, *Journal of Applied Animal Welfare Science*, 11(1), 42-62.

Bussotti, S. (1959) In: Deleuze, G. and Guattari, F. (1987) *A Thousand Plateaus*. London and New York: Bloomsbury Academic, 2013.

Butler, J. (1997) *The Psychic Life of Power; Theories in Subjection*, Stanford, California: Stanford University Press.

Butler, J. (1990/2007) *Gender Trouble*, Abingdon, Oxon, Routledge.

Cage, J. (1961/1973) Silence: Lectures and Writings, Middletown, Connecticut: Wesleyan University Press. Available at: http://monoskop.org/im-ages/6/6b/Cage_John_Silence_Lectures_and_Writings_1973 (Accessed 14th August 2020).

Cain, A. O. (1985) Pets as Family Members, *Marriage and Family Review*, 8(3), 5-10.

Caldas-Coulthard, C. R. and van Leeuwen, T. (2003) Teddy Bear Stories, *Social Semiotics*, 13(1), 5-27.

Carlisle, G. K. (2015) The Social Skills and Attachment to Dogs of Children with Autism Spectrum Disorder, *Journal of Autism and Developmental Disorders*, 45, 1137-1145.

Carlyle, D. (2017) Promoting Pluralism in Counselling: An Untapped Source of Relational Mapping as Therapeutic Process. *International Journal for the Advancement of Counselling*, 39:311–321.

Carlyle, D. (2018) Re-energising the role of vitalism theory in child development, nature orientation and research. *Contemporary Issues in Early Childhood, 19*(3), 246-255.

Carlyle, D. (2019) Walking in rhythm with Deleuze and a dog inside the classroom: Being and becoming happy and well together, *BMJ Medical humanities*, 45(2), 199-210.

Carlyle, D. and Graham, P. (2019) Bodies of knowledge, Kinetic Melodies, Rhythms of Relating and Affect Attunement in Vital Spaces for Multi-Species Well-Being: Finding Common Ground in Intimate Human-Canine and Human-Equine Encounters, *Animals* 2019, *9*(11), 934, 1-16.

Carlyle, D., Robson, I., and Lhussier, M. (2020) Opening Up the Unfamiliar and Enabling New Pathways for Movement and Becoming: Through, In, and Beyond Attachment, *Journal of Childhood Studies*, 45(1), 1-18.

Carlyle, D. (2020) Multiple me, the unfolding ethnographer: Multiple becomings and entanglements as a more-than-human ethnographer, *Entanglements*, 3(1) 31-42.

Casement, P. (1985) On Learning from the Patient, East Sussex, New York: Routledge, 1990.

Cassidy, J. and Shaver, P. R. (2008/2016) *Handbook of attachment: Theory, research and clinical applications*, third edition, New York, London: The Guilford Press.

Causey, A. (2017) *Drawn to See: Drawing as an ethnographic method.* Canada, New York USA, Plymouth UK: University of Toronto Press.

Causey, A. (2020) Personal Communication.

Centre for imaginative Ethnography, (2016) "Welcome to CIE," 2016, Available at: www.imaginativeethnography.org (Accessed 2nd June 2018).

Chen, Y. (2018) *Practising Rhythmanalysis. Theories and Methodologies*. London and New York: Rowman and Littlefield.

Chen, M., Daly, M., Natt, S. and Williams, G. (2000) Non-invasive detection of hypoglycaemia using a novel fully biocompatible and patient friendly alarm system, *British Medical Journal*, 321, 1565-1566.

Chin, E. (2001) *Purchasing Power: Black Kids and American Consumer Culture*, Minneapolis: University of Minnesota.

Cho, G. (2008) Haunting the Korean Diaspora: Shame, Secrecy and the Forgotten War. Minneapolis: University of Minesota.

Children's Commissioner (2018) Children's mental health briefing – A briefing by the Office of the Children's Commissioner for England. Available at: https://www.childrenscommissioner.gov.uk/wp-content/uploads/2019/02/childrens-mental-health-briefing-nov-2018.pdf (Accessed: 21st May 2019).

Clarke, D. and Mcphie, J. (2014) Becoming animate in education: Immanent materiality and outdoor learning for sustainability, *Journal of Adventure Education and Outdoor Learning*, 14(3), 198-216.

Clarke, A. and Moss, P. (2011) Listening to young children: The Mosaic Approach, 2nd Edition: NCB: London.

Clayton, M. (2018) Leonardo Da Vinci: A life in drawing, Royal College Trust.

Cohen, S. P. (2002) Can Pets Function as Family Member? *Western Journal of Nursing Research*, 24(6), 621-638.

Cohn, N. (2013) Visual Narrative Structure, Cognitive Science, Vol 37(3), 413-452.

Colebrook, C. (2015) In: Roffe, J. and Stark, H. (2015) *Deleuze and the Non/Human,* Chapter 12, 217-234, Hampshire, UK, New York, USA: Palgrave Macmillan.

Colebrook, C. (2002a) *Understanding Deleuze*, Australia: Allen and Unwin.

Colebrook, C. (2002b) Gilles Deleuze, Oxon, New York: Routledge.

Collis, G. M., and McNicholas, J. (1998) A theoretical basis for health benefits of pet ownership: Attachment versus psychological support, 105-122. In: Wilson, C. C. and Turner, D. C. (eds) *Companion animals in human health*, London: Sage.

Connolly, L. and Cullen, J. G. (2018) Animals and organisations: an ethic of care framework, *Organization & Environment* 31(4), 406–24.

Constable, S., Dixon, R. and Dixon, R. (2010) For the Love of Dog: The Human-Dog Bond in Rural and Remote Australian Indigenous Communities, *Anthrozoos*, 23(4), 337-349.

Coole, D. and Frost, S. (2010) *New Materialisms. Ontology, Agency and Politics*, Durham and London, Duke University Press.

Cooper, J. (2010) Attaching great importance, Community Care, 2 December 2010 Available at: https://www.patcrittenden.com/include/docs/community_care_crittenden.pdf (Accessed: 4th March 2014).

Corsaro, W. A. (2009) Peer Culture, 301-315. In: Qvortrup, J., Corsaro, W. A., and Honig, M. S. (eds.) *The Palgrave Handbook of Childhood Studies,* London: Palgrave Macmillan.

Crooks, D. (2009) Seeking stillness in movement, Static No. 12, Christchurch Art Gallery Te Puns O Waiwhetu Bulletin B175, March 2014. Available at: https://christ-churchartgallery.org.nz/bulletin/175seeking-stillness-in-movement (Accessed: 4th July 2018).

Crooks, D. (2011) Static No.12 (stillness in motion) 9 April 2011, Courtesy of Daniel Crooks and Anna Schwartz Gallery. Available at: https://youtu.be/sCip5vBIYMo (Accessed 4th July 2018).

Crossman, M. K., Kazdin, A. E. and Knudson, K. (2015) Brief Unstructured Interaction with a Dog Reduces Distress, *Anthrozoos*, 28(4), 649-659.

Dale, J. P., Goggin, J., Leyda, J., McIntyre, A. P., and Negra, D. (2017) *The Aesthetics and Affects of Cuteness*, Oxon, New York: Routledge.

Daly, B. and Morton, L. L. (2006) An investigation of human-animal interactions and empathy as related to pet preference, ownership, attachment and attitudes in children, Anthrozoos, 19(2), 113-127.

Daly, B. and Suggs, S. (2010) Teachers' experiences with humane education and animals in the elementary classroom: implications for empathy development. *Journal for Moral Education*, 39(1), 101-112.

Dalziel, D. J., Uthman, B. M. McGorray, S. P. and Reep, R. L. (2003) Seizurealert dogs: A review and preliminary study, *Seizure* 12, 115-120.

Deci, E. L. and Ryan, R. M. (2008) Hedonia, Eudaimonia, and Well-Being: an Introduction, *Journal of Happiness Studies*, 9, 1-11.

Degeling, C. J., Rock, M., Rogers, W. and Riley, T. (2016) Habitus and responsible dog-ownership: reconsidering the health promotion implications of 'dog shaped' holes in people's lives, *Critical Public Health*, 26(2), 191-206.

Degen, M. M. (2008) Sensing *Cities, Regenerating Public Life in Barcelona and Manchester,* London and New York: Routledge.

Deleuze, G. (1986) *Cinema 1: The Movement-Image*, Translator H. Tomlinson and B. Habberjam, London: Athone.

Deleuze, G. (1998) Essays Critical and Clinical, Trans. by Daniel W. Smith and Michael, A. Greco, London and New York: Verso.

Deleuze, G. (1995) *Negotiations*, Trans. Martin Joughin, Chichester, West Sussex, New York: Columbia University Press.

Deleuze, G. (1994) *Difference and Repetition,* (Trans. by Paul Patton), London: Athlone Press.

Deleuze, G. and Guattari, F. (1994) What is Philosophy? Translated by Hugh Tomlinson and Graham Burchell, New York: Columbia University Press.

Deleuze, G. and Guattari, F. (1987) *A Thousand Plateaus*, Trans. Brian Massumi, London and New York: Bloomsbury Academic, 2013.

Deleuze, G. and Guattari, F. (1988) *A thousand plateaus: Capitalism and schizo-phrenia*, trans. Brian Massumi, London: Athlone Press.

Deleuze, G. and Guattari, F. (1983/2000) *Anti- Opedipus: Capitalism and Schizo-phrenia,* Trans. Robert Hurley, Mark Seem and Helen R. Lane, Minneapolis: University of Minnesota Press.

Delingy, F. (2015) *The Arachnean and Other Texts,* Trans. Drew S. Burk and Catherine Potter, Minneapolis, Univocal Publishing.

Del Prete, T. (1998) getting back in touch with students: Should we risk it? *Professional School Counseling*, 1(4), 62-65.

Department for Health / Department of Education (2017) *Transforming Children and Young People's Mental Health Provision: A Green Paper.* London: Her Majesty's Stationary Office. Available at: https://assets.publishing.service.gov.uk/govern-ment/uploads/system/uploads/attachment_data/file/664855/Transforming_children_and_young_people_s_mental_health_provision.pdf Accessed 4th June 2018.

Department for Education and Skills (DfES) (2007) The Early Years Foundation Stage, London: HMSO.

Derevenski, J. S. (2000) Children and Material Culture, London: Routledge.

Derrida, J. (2008) *The Animal That Therefore I Am.* Mallet, M. (ed) (trans. David Willis) New York: Fordham University Press.

Descartes, R. (1988) *Descartes Selected Philosophical Writings*. Trans. John Cottingham, Robert Stoothoff, Dugald Murdoch, Cambridge, New York, Melbourne: Cambridge University Press.

Despret, V. (2004) The Body we Care For: Figures of Anthropo-zoo-genesis. *Body and Society*, 10(2-3), 111-134.

Despret, V. (2008) In: Ohrem, D. and Bartosch, R. (2017) *Beyond the Human-Animal Divide: Creaturely Lives in Literature and Culture*, Sheffield UK, Biddeford, USA: Palgave Macmillan.

Despret, V. (2012) What Would Animals Say If We Asked The Right Questions? Translated by Brett Buchanan, Minneapolis, MN and London: University of Minnesota Press.

Diamond, A. and Lee, K. (2011) Interventions shown to aid executive function development in children 4-12 years old. *Science*, 333, 959-964.

Dietz, T. J., Davis, D., and Pennings, J. (2012) Evaluating Animal-Assisted Therapy in Group Treatment for Child Sexual Abuse, *Journal of Child Sexual Abuse*, 21(6), 665-683.

Dogs Helping Kids (2019) *Paws and Minds Entwined.* Available at: https://www.dogshelpingkids.co.uk/index.php (Accessed: 2nd May 2019).

Dogs Trust (2019) *Dogs in schools: Our response.* Available at: https://www.dogstrust.org.uk/news-events/news//2019/school-dogs (Accessed: 20th June 2019).

Donovon, J. (2006) Feminism and the Treatment of Animals: From Care to Dialogue, *Signs*, 31(2), 305-329.

Drabble, C. (2019) *Introducing a School Dog: Our Adventures with Doodles the Schnoodle*, London, UK and Philadelphia, USA: Jessica Kingsley Publishers.

Duneier, M. (2011) How not to lie in ethnography, *Sociological Methodology*, 41(4), 1-11.

Dunn, W. (2005) In: Sameroff, A. J. McDonough, S.C., and Rosenblum, K.L. (2005) *Treating parent-infant relationship problems: strategies for intervention.* London, New York: The Guilford Press.

Dunn, J. (1983) Sibling relationships in early childhood. *Society for Research in Child Development*, *54*(4), 787-811.

Durkheim, E. (1995) *The Elementary Forms of Religious Life*, Trans. K.E. Fields, New York: Free Press.

Duschinsky, R., Greco, M. & Solomon J. (2015a) The Politics of Attachment: Lines of Flight with Bowlby, Deleuze & Guattari. *Theory, Culture & Society*, Vol 327 (7-8) 173-195.

Duschinsky, R., Greco, M., Solomon, & J. (2015b) Wait Up! Attachment and Sovereign Power. *International Journal of Political Culture & Society, 28*, 223-242.

Eagleman, D. M. (2011) The Umwelt, Edge, 'What Scientific Concept Would Improve Everybody'd Cognitive Toolkit?' Available at: https://www.edge.org/response-detail/11498 (Accessed 9th March 2017).

Ecclestone, K and Hayes, D. (2019) *The Dangerous Rise of Therapeutic Education*. Classic Edition, London and New York: Routledge.

Edensor, T. (2010) Walking in rhythms: place, regulation, style and the flow of experience. *Visual Studies*, *25*(1), 69-79.

El-Alayli, A., Lystad, A. L., Webb, S. R., Hollingsworth, S. L. and Ciolli, J. L. (2006) Reigning Cats and Dogs: A Pet-Enhancement Bias and Its Link to Pet Attachment, Pet-Self Similarity, Self-Enhancement, and Well-Being, *Basic and Applied Social Psychology*, 28(2), 131-143.

Ellingson, L. L. (2017) *Embodiment in Qualitative Research*, Abingdon, Oxon, New York, USA: Routledge.

Endenburg, N. and van Lith, H. A. (2011) The influence of animals on the development of children. *The Veterinary Journal*, 190, 208-214.

Epstein, B. (2015) The Ant Trap. New York: Oxford University Press.

Esposito, L., McCune, S., Griffin, J. A., and Maholmes, V. (2011) Directions in Human-Animal Interaction Research: Child Development, Health and Therapeutic Interventions. *Child Development Perspectives*, *5*(3), 205-211.

Etter, S. (2005) Does my dog really love me? Phys Org, July 7, 2005. Available at: https://phys.org/news/2005-07-dog.html (Accessed: 20th May 2016).

Fairchild, N. (2019) The micropolitics of posthuman early years leadership assemblages: Exploring more-than-human relationality, *Contemporary Issues in Early Childhood*, 20(1), 53-64.

Feldman Barrett L., Mesquita, B., and Gross, J. J. (2007) *The Experience of Emotion*, Annual Review of Psychology, 58, 373-403.

Fetterman, D. M. (2010) *Ethnography: Step-by-Step*. 3rd Edition, Applied Social Research Methods Series, Volume 17. Los Angeles, London, New Delhi, Singapore, Washington DC: Sage.

Fillatre, J. C., Millot, J. L., and Montagner, H. (1986) New data on communication behaviour between the young child and his pet dog, *Behavioral Processes*, 12(1), 33-44.

Foucault, M. (1982) Bio-power, In: Drefus, H. and Rabinow, P. (Eds.) *Michel Foucault: Beyond structuralism and hermeneutics,* Chicago, IL: University of Chicago Press.

Fine, A. H., Beck, A. M., and Ng, Z. (2019) The State of Animal-Assisted Interventions: Addressing the Contemporary Issues that will Shape the Future. *International Journal of Environmental Research and Public Health*, 16, 3997, 1-18.

Fraser, M and Puwar, N. (2008) Introduction: intimacy in research, *History of the Human Sciences*, 21:4, 1-16.

Friedman, E., Katcher, A. H., Thomas, S. A., Lynch, J. J. and Messent, P. R. (1983) Social interaction and blood pressure. Influence of animal companions, *The Journal of Nervous and Mental Health Disease*, 171(8), 461-465.

Friere, P. (1970/2005) *Pedagogy of the Oppressed,* 30th Anniversary Edition, Translated by Myra Bergman Ramos, London, New York: Continum Books.

Friesen, L. (2010) Literacy to learning goes to the dogs: Animal-assisted literacy proves positive, ATA Magazine, 91(2), 14-16.

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

Gallacher, L. (2006) Block play, the sand pit and the doll corner: the (dis)ordering materilaities of educating young children. Institute of Geography Online Paper Series: GEO-011. Available at: https://era.ed.ac.uk (Accessed: 17th October 2016)

Gallacher, L. (2005) The terrible twos: Gaining control in the nursery, *Children's Geographies*, 3(2), 243-264.

Gallagher, M. (2010) Are Schools Panoptic? *Surveillance and Society*, 7(3/4), 262-272.

Gallard, D. (2019) *Dogs in the classroom – coming to a school near you soon.* Available at: https://theconversation.com/dogs-in-the-classroom-coming-to-a-school-near-you-soon-114392 (Accessed: 21st May 2019).

Gane. N and Haraway, D. J. (2006) When We Have Never Been Human, What Is to Be Done? *Theory, Culture and Society*, 23(7-8), 135-158.

Garfinkel, H. (1967) Studies in ethnomethodology. New Jersey: Prentice-Hall.

Gatens, M. and Lloyd, G. (1999) *Collective Imaginings: Spinoza, Past and Present.* London and New York: Routledge.

Gaze, T. (2008) Asemic movement 1. Available at: http://is-suu.com/eexxiitt/docs/aesemicmovement1 (Accessed 14th September 2020).

Gee, N. R., Harris, S. L. and Johnson, K. L. (2007) The Role of Therapy Dogs in Speed and Accuracy to Complete Motor Skills Tasks for Preschool Children. *Anthrozoos, 20*(4), 374-386.

Gee, N. R., Church, M. T. and Altobelli, C. L. (2010a). Preschoolers Make Fewer Errors on an Object Categorization Task in the Presence of a Dog. *Anthrozoos*, *23*(3), 223-230.

Gee, N. R., Crist, E.N., and Carr, D.N. (2010b) Preschool Children Require Fewer Instructional Prompts to Perform a Memory Task in the Presence of a Dog. *Anthrozoos*, 23(2), 173-184.

Gee, N. R., Belcher, J.M., Graspki, J.L., DeJesus, M., and Riley, W. (2012). The Presence of a Therapy Dog Results in Improved Object Recognition Performance in Preschool Children. *Anthrozoos*, *25*(3), 289-300.

Gee, N. R., Griffin, J., and McCardle, P. (2017) 'Human-Animal Interaction Research in School Setting: Current Knowledge and Future Directions' *AERA Open,* vol. 3, no. 3, pp. 1-9.

Gee, N. R. (2018) Research methods used to consider the impact of HAI on older adults' health. Paper presented at the Animals in Our Lives Conference: Multidisciplinary approaches to the study of human-animal interactions, University Sydney, Australia, 3 July 2018.

Geertz, C. (1998) Deep hanging out, The New York review of books, 45(16), 69-72.

Gesell, A. L. and Ilg, F. (1949) In: Dalton, T. C. (2005) Arnold Gessell and the Maturation Controversy, Integrative Physiological and Behavioral Science, 40(4), 182-204.

Gherardi, S., Murgia, A., Belle, E., Miele, F., and Carreri, A. (2019) Tracking the sociomaterial traces of affect at the crossroads of affect and practice theories, *Qualitative Research in Organizations Management*, 14(3), 295-316.

Gherardi, S. (2017) One turn...and now another one: Do the turn to practice and the turn to affect have something in common? *Management Learning*, 48, 345-358.

Gibson, J. J. (1979) *The Ecological Approach to Visual Perception*. New Jersey: Lawrence Elbaum.

Gibson, M. (2015). Remembered Reading. Memory, Comics and Post-war Constructions of British Girlhood, Belgium: Leuven University Press.

Gibson-Graham, J. K. (2011) A feminist project of belonging for the Anthropocene, *Gender, Place and Culture*, 18(01), 1-21.

Gobo, G. (2008) *Doing Ethnography*. London: Sage Books.

Graham, J. (2015) Rhythmanalysis: the line as a record of the moving present, *Journal of Visual Art Practice*, 14:1, 54-71.

Green, L. (2006) The Language of dogs: Intermediate forms in global culture. *Current Writing: Text and Reception in South Africa*, 18(1), 103-118.

Griffero, T. (2019) Well-being as a Collective Atmosphere. *Lebenswelt*, 15, 46-32.

Griffero, T. (2010) *Atmospheres: Aesthetics of Emotional Spaces*, England and USA: Ashgate Publishing.

Gulllov, E. (2003) Ethnographic study of Danish kindergartens, 23-38. In: *Children's places- Cross-cultural perspectives*, Olwig, K. F. and Gullov, E. (eds.) London: Routledge.

Grossberg, J. M. and Alf, E. F. (1985) Interaction with pet dogs: Effects on human cardiovascular response, *Journal of the Delta* Society, 2(1), 20-27.

Hackett, A., Proctor, L. and Seymour, J. (2015) *Children's Spatialities: Embodiment, Emotion and Agency.* London: Palgrave MacMillan.

Hague, I. (2018) Comics and the Senses: A Multisensory Approach to Comics and Graphic Novels. Oxfordshire and New York: Routledge.

Hall, S. S., Gee, N.R. and Mills, D.S. (2016) Children Reading to Dogs: A systematic Review of the Literature. *PLOS One*, *11*(2), 1-22.

Hamama, L., Hamama-Raz, Y., Dagan, K., Greenfield, H., Rubinstein, C. and Ben-Ezra, M. (2011) A preliminary study of group intervention along with basic canine training among traumatized teenagers: A 3-month longitudinal study, *Children and Youth Services Review*, 33(1), 1975-1980.

Haraway, D. J. (1988) Situated Knowledge: The Science Question in Feminism and the Privilege of Partial Perspective. *Feminist Studies*, *14*(3), 575-599.

Haraway, D. J. (2003) *The Companion Species Manifesto. Dogs, People and Significant Otherness*, Chicago: Prickly Paradigm Press.

Haraway, D. J. (2008) When Species Meet, Minneapolis, London: University of Minnesota Press.

Haraway, D. J. (1991) Simians, Cyborgs and Women: The Reinvention of Nature, London: Free Association Books.

Haraway, D. J. (1987) *Modest Witness* @Second_Millie-nium. Female-Man_Meets_OncoMouse, New York and London: Routledge.

Harker, C. (2005) Playing and affective time-spaces, *Children's Geographies*, 3(1), 47-62

Harvey, G. (2006) *Animism: Respecting the Living World,* New York, USA: Columbia University Press.

Havener, L., Gentes, L., Thaler, B., Megel, M., Baun, M., Driscoll, F., Beiraghi, S. and Agrawal, N. (2001) The Effects of Companion Animal on Distress in Children Undergoing Dental Procedures, *Comprehensive Pediatric, Nursing*, 24(2), 137-152.

Hawkins, R. and Williams, J. (2017) Assessing effectiveness of a non-human animal welfare education program for Primary School Children, *Journal of Applied Animal Welfare Science*, 20(3), 240-256.

Hayes-Conroy, J. and Hayes-Conroy, A. (2010) Visceral geographies: mattering, relating and defying. *Geography Compass*, 4(9), pp81-90.

Hayles, N. K. (2017) *Unthought*, Chicago and London: University of Chicago Press.

Heady, B. (1998) Health benefits and health cost savings due to pets: Preliminary estimates from an Australian national survey, *Social Indicators Research*, 38, 66-73.

Heiman, M. (1965) Psychoanalytic observations on the relationship of pet and man, *Veterinary Medicine/Small Animal Clinician*, 60, 713-718.

Hergovich, A., Monish, B., Semmler. G. and Zieglmayer, V. (2002) The effects of the presence of a dog in the classroom. *Anthrozoos*, 15(1), 37-50.

Hetherington, K. (2003) Spatial textures: place, touch, and praesentia. *Environment and Planning A*, 35(11) pp. 1933–1944.

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

Holloway, S.L. and G. Valentine, (2000) *Children's Geographies: playing, living, learning*, London: Routledge.

Holmberg, T. (2019) Walking, eating, sleeping. Rhythm analysis of human/dog intimacy, *Emotion, Space and Society*, 31, 26-31.

Horowitz, A. (2019) *Our Dogs, Ourselves*, London, UK, New York, USA: Simon and Schuster.

Horschelmann, K., and Colls, R. (2010) *Contested Bodies of Childhood and Youth.* New York: Palgrave Macmillan.

Horton, J., Christensen, P., Kraftl, P. and Hadfield-Hill, S. (2014) Walking...just walking: how children and young people 's everyday pedestrian practices matter, *Social and Cultural Geography*, 15(1), 94-115.

Horton, J. (2012) Got my shoes, got my Pokémon: Everyday geographies of children's popular culture, *Geoform*, 43(1), 4-13.

Horton, J., and Kraftl, P. (2006a) Not just growing up, but going on: Materials, Spacings, Bodies, Situations, *Children's Geographies*, 4(3), 259-276.

Horton, J. and Kraftl, P. (2006b) What else? Some more ways of thinking and doing 'Children's Geographies', *Children's Geographies*, 4:01, 69-95.

Horvoka, A. J. (2015) The Gender, Place and Culture Jan Monk Distinguished Annual Lecture: Feminism and animals: exploring interspecies relations through intersectionality, performativity and standpoint, *Gender, Place & Culture*, 22(1), 1-19.

Ingold, T. and Lee Vergunst, J. (2008) Ways of Walking: Ethnography and Practice on Foot, (eds), Aldershot: Ashgate.

Ingold, T. (2008) Bindings Against Boundaries: Entanglements of Life in an Open World, *Environment and Planning A*, 40, 1796-1810.

Ingold, T. (2011) Being Alive: Essays on Movement, Knowledge and Description, Oxon, UK and New York, USA: Routledge.

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

Ingold, T. (2013b) Anthropology Beyond Humanity. Suomen Antropologi/Journal of the Finnish Anthropology Society, 38, 3, 15-23.

Ingold, T. (2014) That's enough about ethnography!, *Journal of Ethnographic Theory*, 4(1), 383-395.

Ingold, T. (2016a) *Lines*. London and New York: Routledge Classics.

Ingold, T. (2016b) On human correspondence, *Journal of the Royal Anthropological Institute* (N.S.), 23, 9-27.

Ingold, T. (2021) Correspondences, Cambridge, UK: Polity Press

Jalongo, M., Astorion, T. and Bomboy, N. (2004). Canine Visitors: The Influence of Therapy Dogs on Young Children's Learning and Well-Being in Classrooms and Hospitals, *Early Childhood Education Journal*, *32*(1), 9-16.

James, A., Jenks, C., and Prout, A. (1998) *Theorizing Childhood*. Cambridge: Polity Press, 2001.

James, A. (2001) Handbook of Ethnography. London: Sage.

James, J. (2016) Children as service users of a children's centre. *Community Practitioner*, 89(03), 42-45.

Jegatheesan, B. and Witz, K. (2014) Waheeda Remembering Her Cat Izzy: A Study in the Consciousness of a Child. *Qualitative Inquiry*, 20(1), 81-94.

Jenkins, C. D., Laux, J. M., Ritchie, and Tucker-Gail, K. (2014) Animal-Assisted Therapy and Rogers' Core Components Among Middle School Students Receiving Counseling Services: A Descriptive Study, *Journal of Creativity in Mental Health*, 9(2), 174-187.

Jessor, R., Colby, A., and Shweder, R. A. (1996) Ethnography and human development: context and meaning in social inquiry. Chicago and London: The University of Chicago Press.

Johnson, T. P., Garrity, T. F. and Stallones, L. (1992) Psychometric evaluation of the Lexington Attachment to Pets Scale (LAPS), *Anthrozoos*, 5(3), 160-175.

Jones, L., MacLure, M., Holmes, R., and MacRae, C. (2012) Children and objects: affection and infection, *Early Years*, 32(1), 49-60.

Jenks, C. (2010) Chapter 2, Children's Bodies an Absent Presence, 22-37. In: Horschelmann, K. and Colls, R. (2010) *Contested Bodies of Childhood and Youth.* Basingstoke: Palgrave Macmillan.

Julius, H. (2009) Diagnostik der Bindunsqalitat im Grundschulater- Der Separation Anxiety Test (SAT) In: *Bindung im Kindesalter*, 121-137, ed H. Julius, B. Gasteiger-Klicpera and R. Kissgen, Gottingen: Hogrefe.

Kafka, F. (1971) *The Complete Stories*, (Trans. W. and E. Muir), ed. N Glatzer, New York: Schocken Books Inc.

Kalpadaki, E. (2007) The Empty Space in Abstract Photography: A Psychoanalytical Perspective, *Spaces*, 1(1), 1-9.

Kaminski, M, Pellino, T. and Wish, J. (2002) Play and Pets: The Physical and Emotional Impact of Child-Life and Pet Therapy on Hospitalized Children. *Children's Health Care*, 31(4), 321-335.

Keane, W. (2005) Signs are not the garb of meaning: On the social analysis of material things., 182-205. In: *Materiality,* Miller, D. (ed.) Durham, NC: Duke University Press.

Kemp, K., Signal, T., Botros, H., Taylor, N., and Prentice, K. (2013) Equine Facilitated Therapy with Children and Adolescents Who have Been Sexually Abused: A Program Evaluation Study, *Journal of Child and Family Studies*, 23(3), 558-566.

Kiminski, M., Pellino, T., and Wish, J. (2002) Play and pets: the physical and emotional impact of child-life and pet therapy on hospitalised children. *Children's Health Care, 31*, 321-335.

Kirton, A., Wirrell, E., Zhang, J. and Hamiwka, L. (2004) Seizure-alerting and-response behaviors in dogs living with epileptic children, *Neurology*, 62, 2303-2305.

Klagsburn, M. and Bowlby, J. (1976) Responses to separation from parents: A clinical test for young children, *British Journal of Projective Psychology*, 21, 7-21.

Klee, P. (1961). *Paul Klee notebooks: The thinking eye vol 1.* Available at: https://archive.org/stream/PaulKleeNotebooksVol1TheThinkingEye/Paul_Klee_Note-books_Vol_1_The_Thinking_Eye_djvu.txt (Accessed 20th March 2018)

Knight, S. and Edwards, V. (2008) In the Company of Wolves: The Physical, Social, and Psychological Benefits of Dog Ownership, *Journal of Aging and Health*, 20(4), 437-455.

Knudsen, B. T. and Stage, C. (2015) *Affective Methodologies*, Hampshire, UK and New York, USA: Palgrave Macmillan.

Kohn, E. (2007) Chapter 8 Training in the Contact Zone, 218-219 In: Haraway, D. J. (2008) *When Species Meet*, Minneapolis, London: University of Minnesota Press.

Kotlas, K. (2007) 'What is Planomenology?' Planomenology Blogspot, 25 March. Available at: http://planomenology.blogspot.com/2007/03/what-is-planomenology.html (Accessed 14 December 2018)

Kotrschal, K. and Ortbauer, B. (2003) Behavioral effects of the presence of a dog in a classroom. *Anthrozoos*, *16*(2), 147-159.

Kirschbaum, C. Pirke, K. M., and Hellhammer, D. H. (1993) The 'Trier Social Stress Test" -a tool for investigating psychobiological stress responses in a laboratory setting, *Neuropsychobiology*, 28, 76-81.

Kruger,K., Trachtenberg, S., and Serpell, J. (2004) Can animals help humans heal? Animal-assisted interventions in adolescent mental health, Philadelphia, PA: Centre for the Interaction of Animals and Society, University of Pennsylvania School of Veterinary Medicine. Available at: https://research.vet.upenn.edu/Portals/36/media/CIAS_AAI_white_paper.pdf (Accessed: 17 October 2016)

Kubinyi, E., Viranyl, Z. and Miklosi, A. (2007) Comparative Social Cognition: From wolf and dog to humans, *Comparative Cognition and Behavior Review*, 2, 26-46.

Kurdek, L. A. (2008) Pet dogs as attachment figures, *Journal of Social and Personal Relationships*, 25(2), 247-266.

Labanyi, J. (2010) Doing things: Emotion, affect and materiality. *Journal of Spanish Cultural Studies*, 11, 223-233.

Lacan, J. (1966) In: Gallop, J. (1982) Lacan's "mirror Stage" Where to Begin, *Sub-Stance*, 11/12(4), 118-128.

La Guardia, J. G., Ryan, R. M., Couchman, C. E., and Deci, E. L. (2000) Within-person variation in security of attachment: a self-determination theory perspective on attachment, need fulfilment, and well-being. *Journal of Personality and Social Psychology*, 70(3), 367-384.

Langer, S. (1953) In: Ingold, T. (2016) *Lines*. London and New York: Routledge Classics, (Chapter 1:8).

Large, E. W. and Kolen, J. F. (1994) Resonance and the perception of musical meter. *Connection Science: Journal of Neural Computing, Artificial Intelligence and Cognitive Research*, 6 (2-3), 177-208.

Latour, B. (1993) We Have Never Been Modern. Brighton: Harvester Wheatsheaf.

Latour, B. (2005) Reassembling the Social: An Introduction to Actor-Network-Theory. Oxford: Oxford University Press.

Latimer, J. and Gomez, D. L. (2019) Intimate Entanglements: Affects, more-than-human intimacies and the politics of relations in science and technology, *The Sociological Review Monographs*, 67(2), 247-263.

Law, J. (2004) After Method: Mess in Social Science Research, Oxon, UK, New York, USA: Routledge.

Lawrence-Lightfoot, S. and Davis, J. H. (1997) *The art and science of portraiture*, San Francisco, CA: Jossey-Bass.

Layard, R. and Dunn, J. (2009) A Good Childhood. London: Penguin Books.

Le Breton, D. (2006/2020) *Sensing the World: An Anthropology of the Senses*. Trans. Carmen Ruschiensky, London and New York: Routledge.

Le Boyer, F. (1974/2011) Birth Without Violence, New York: Pinter & Martin Ltd.

Le Boyer, F. (1976) Loving Hands: The Traditional Art of Baby Massage, New York: US, Newmarket.

Lefebvre, H. (2004) *Rhythmanalysis: Space, Time and Everyday Life.* Trans. Elden, S. and Moore, G. London and New York: Continuum.

Lefebvre, H. (1991) *The Production of Space.* (Trans. Donald Nicholson-Smith), Oxford, UK and Cambridge, USA: Blackwell.

Lee, N. (2001) Childhood and Society, Buckingham: Open University Press.

Lee, P. C. (2012) The Human Child's Nature Orientation. *Child Development Perspectives*, *6*(2), 193-198.

Lenz Taguchi, H. (2010) Going beyond the theory/practice divide in early childhood education. Introducing an intra-active pedagogy, New York: Routledge.

Levi-Strauss, C. (1955) The Structural Study of Myth. A Symposium (Oct-Dec 1955) *The Journal of American Folklore*, 68 (270), 428-444. Available at: https://www.jstor.org/stable/pdf/536768.pdf?refreqid=excel-sior%3A625e1a4c3225d081421dd9324bcef370 (Accessed 22nd May 2017).

Levinson, B. M. (1984) Human/companion animal therapy, *Journal of Contemporary Psychotherapy*, 14, 131-144.

Lewis, H. and Grigg, R. (2021) *Tails from the classroom: Learning and teaching through animal-assisted interventions*, Wales: Crown House Publishing.

Leys, R. (2011) The Turn to Affect: A critique. Critical Inquiry, 37(3), 434-472.

Lhussier, M. (2009). *Quality of life: Nomadological insights. A nomadic exploration of quality of life in long-term conditions.* Berlin, Germany: VDM Publishing House.

Light, A. and Smith, J. M. (2005) *The Aesthetics of Everyday Life*, New York: Columbia University Press.

Loften, A. and Vaughan-Lee, E. (2020) Counter Mapping, Emergence Magazine, Available at: https://emergencemagazine.org, Accessed: 3rd December 2020.

Lorenz, K. (1943) In: Dale, J. P., Goggin, J., Leyda, J., McIntyre, A. P., and Negra, D. (2017) *The Aesthetics and Affects of Cuteness*, Oxon, New York: Routledge.

Lorimer, H. (2006) Herding Memories of Humans and Animals. *Environment and Planning D: Society and Space*, 24, 497-518.

Lorimer, J. (2010) Elephants as companion species: the lively biographies of Asian elephant conservation in Sri Lanka, *Transactions of the Institute of British Geographers*, 35, 491-506.

Lorimer, J. (2007) Non-Human Charisma. *Environment and Planning D: Society and Space*, 25, 911-932.

Lorimer, J. (2006) In: Lee, R. C., N.; Kitchin, R.; Lawson, V.; Passi, A.; Philo, C.; Radcliffe, S.; Roberts, S.M.; and Withers, C.W. (2014) *The Sage Handbook of Human Geography: Volume 1.* London: Sage.

Lorraine, T. (2005) "Lines of Flight" In: *Deleuze Dictionary*, Parr, A. (ed.), pp 144-146, Edinburgh: Edinburgh University Press.

Lupton, D. (1998) *The Emotional Self*, London: Sage.

Lupton, D. (2013) Infants and Objects. *Presentation at the Relational Consumption:* Beyond Individuals and Choices Workshop, Monash University, Melbourne 16 August 2013.

Lyon, D. (2019) What is Rhythmanalysis? London and New York: Bloomsbury.

MacDonald, E. (1991) The Trouble with Subjects: Feminism, Marxism and the Questions of Poststructuralism, *Studies in Political Economy*, 35(1), 43-71.

Mack, D. (2005) In: Hague, I. (2018) *Comics and the Senses: A Multisensory Approach to Comics and Graphic Novels.* Oxfordshire and New York: Routledge.

MacLure, M. (2103) In: Knudsen, B. T. and Stage, C. (2015) *Affective Methodologies*, Chapter 1, page 7, Hampshire, UK and New York, USA: Palgrave Macmillan.

MacPherson, S. (1999) Interspecies encounters, chapter 9: 159, In: Rice, S. and Rud, A. G. (2016) *The Educational Significance of Human and Non-Human Animal Interactions*, London: Palgrave Macmillan.

Maharaj, N. and Haney, C. J. (2015) A Qualitative Investigation of the Significance of Companion Dogs, *Western Journal of Nursing Research*, 37(9), 1175-1193.

Malloch, S. and Trevarthen, C. (2009) *Communicative musicality: exploring the basis of human companionship*, Oxford: Oxford University Press.

Malone, K. (2015) Theorizing a child-dog encounter in the slums of La Paz using post-humanistic approaches in order to disrupt universalism in current 'child-nature' debates, *Children's Geographies*, 14(4), 390-407.

Manning, E. (2013) Always More Than One: Individuation's Dance, USA: Duke University Press.

Manning, E. (2009/2012) *Relationscapes*: Movement, Art, Philosophy, USA: MIT Press.

Manning, E. (2009) What if it Didn't All Begin and End with Containment? Toward a Leaky Sense of Self. *Body and Society*, *15*(3), 33-45.

Manning, E. (2007) *The Politics of Touch: Sense, Movement Sovereignty*. Minneapolis and London, University of Minnesota Press.

Martin, A. (2005). Agents in Inter-Action: Bruno Latour and Agency. *Journal of Archaeological Method and Theory, 12*(4), 283-311.

Martin, F. and Farnum, J. (2002) Animal-assisted therapy for children with pervasive developmental disorders, *Western Journal of Nursing Research*, 24(6), 657-670.

Maurstad, A., Davis, D. L., and Cowles, S. (2013) Co-being and intra-action in horse-human relationships: A multi-species ethnography of be(com)ing human and be(com)ing horse, *Social Anthropology*, 21(3), 322-335.

Mason, J. and Danby, S. (2011) Children as Experts in Their Lives: Child Inclusive Research. *Child Indicators Research*, *4*, 185-189. doi:doi: 10.1007/s12187-011-9108-4.

Massen, J. J. M. and Gallup, A. G. (2017) Why contagious yawning does not (yet) equate to empathy, *Neuroscience and Biobehavioral Reviews*, 80, 573-585.

Massey, D. (2005) For Space, London, California, New Delhi: Sage Publishers.

Massumi, B. (1996) *The autonomy of affect*. In: Patton, P. (Ed), Deleuze: A critical reader. Oxford: Blackwell.

Massumi, B. (2002a) *Parables for the Virtual: Movement, affects, sensation,* US: Duke University Press.

Massumi, B. (2002b). A Shock to Thought. London: Routledge.

May, T. (1997) In: Watson, D., Emery, C., and Bayliss with Boushel, M., and McInnes, K. (2012) *Children's social and emotional wellbeing in schools: A Critical Perspective*. Bristol and Chicago: Polity Press.

Mayer, R. E. and Massa, L. J. (2003) Three Facets of Visual and Verbal Learners: Cognitive Ability, Cognitive Style and Learning Preference. *Journal of Education Psychology*, 95 (4), 833.

McAulay, V., Deary, I. and Frier, B. (2001) Symptoms of hypoglycaemia in people with diabetes, *Diabetic Medicine*, 18, 690-704.

McCloud, S. (1993). *Understanding Comics: The Invisible Art.* New York: Harper Perennial, 1994.

McCormack, D. P. (2002). A paper with an interest in rhythm. *Geoforum*, 33, 469

McCormack, D. P. (2004) Cultural Geographies in Practice: Drawing out the Lines of the Event. *Cultural Geographies*, 11(2), 211-220.

McCormack, D. P. (2006) For the love of pipes and cables: a response to Deborah Thien, *Area* 38, 330-332.

McCormack, D. P. (2008) Geographies for moving bodies: Thinking, dancing, spaces. *Geography Compass*, 2, 1822-1836.

McCormack, D. P. (2013). Refrains for Moving Bodies: Experience and Experiment in Affective Spaces. Durham and London: Duke University Press.

McCullough, L. M. (2011) Effect of Equine-facilitated Psychotherapy on Posttraumatic Stress Symptoms in Youth with History of Maltreatment and Abuse, PhD thesis), North Central University, Prescott Valley, AZ: ProQuest Information and Learning. Available at:

https://search.proquest.com/docview/897644574/fulltextPDF/2D7D8950D7590D759 (Accessed 17 October 2016)

McCullough, A., Jenkins, M., Ruehrdanz, A., Gilmer, M. J., Olson, J., Pawar, J., Anjali, H., Sierra-Rivera, L., Linder, S., Pinchette, D. E., Grossman, N. J., Hellman, C., Guerin, N., and O'Haire, M. (2018) Physiological and behavioural effects of animal-assisted interventions for therapy dogs in pediatric oncology settings, *Department of Comparative Pathobiology Faculty Publications*, Paper 37.

McCune, S. Kruger, K.A., Griffin, J.A., Esposito, Freund, L.S, Hurley, K.J. and Brues, R. (2014) Evolution of research into the mutual benefits of human-animal interaction. *Animal Frontiers*, *4*(3), 49-58.

McNicholas, J., Gibley, A.R., Ahmedzai, S., Dono, J. and Ormerod, E. (2005). Pet ownership and human health: a brief review of evidence and issues. *British Medical Journal*, 331, 1252-1255.

Mcphie, J. (2019) *Mental Health and Wellbeing in the Anthropocene: A posthuman Inquiry,* Singapore: Palgrave Macmillan.

Mcphie, J. and Clarke, D. A. G. (2015) A Walk in the Park: Considering Practice for Outdoor Environmental Education Through an Immanent Take on the Material Turn, *The Journal of Environmental Education*, 46(4), 230-250.

Melson, G.F. (2003) Child development and the human-companion animal bond. *American Behavioral Scientist.* 47(1), 31-39.

Meslon, G. F. and Fine, A. H. (2006) Animals in the lives of children, 207-226. In: Fine, A. H. (ed), *Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice*, New York, NY: Elsevier.

Melville, H. (2014) *Moby Dick*, New York: Black and White Classics.

Menor-Campos, D. J., Hawkins, R., & Williams, J. (2018) Belief in Animal Mind among Spanish Primary School Children. *Anthrozoos*, *31*(5), 599-614. doi:10.1080/08927936.2018.1505340

Merleau-Ponty, M. (1962) *Phenomenology of perception* (Translated by C. Smith) London: Kegan Paul.

Merleau-Ponty, M. (1968). *The Visible and the Invisible. (Translated by A. Lingus.)* Evanston IL: Northwestern University Press.

Merewether, J. (2019) Listening with young children: enchanted animism of trees, rocks, clouds (and other things), Pedagogy, Culture and Society, 27(2), 233-250.

Michalko, R. (1999) *The Two-In-One: Walking with Smokie, Walking with Blindness*, Philadelphia, Temple University Press.

Miller, D. (2008) The Comfort of Things. Cambridge: Polity Press.

Milton, K. (2005) "Anthropomorphism or egomorphism? The perception of non-human persons by human ones" In: J. Knight (Ed.) *Animals in Person: Cultural Perspectives on Human-Animal Intimacies.*, Berg, 255-271.

Miklosi, A. (2015) *Dog Behaviour, Evolution, and Cognition*. 2nd edition, Oxford: Oxford University Press.

Minatrea, N. and Wesley, M. (2008) Reality therapy goes to the dogs. *International Journal of Reality Therapy*, 28(1), 69-77.

Mitchell, J. (2003) Siblings. Oxford: Polity Press, Blackwell Publishing.

Montagu, A. (1986). *Touching: The Human Significance of the Skin*, 3rd edition, New York: Harper and Row.

Morphy, H. (1992) From Dull to Brilliant: The Aesthetics of Spiritual Power among the Yolngu, 8-199, In: Coote, J. and Shelton, A. (1992) *Anthropology, Art and Aesthetics*, Oxford: Clarendon Press.

Morrison, M. L. (2007) Health benefits of animal assisted interventions, *Complementary Health Practice Review*, 12(1), 51-62.

Moss, P. and Petrie, P. (2002) From Children's Services to Children's Spaces. London and New York: Routledge Falmer.

Murphy, R. A., Sink, H. E., Ake, G. S., Carmody, K. A. Amaya-Jackson, L. M. and Briggs, E. C. (2014) Predictors of treatment completion in a sample of youth who have experienced physical or sexual trauma, *Journal of Inter-personal Violence*, 29(1), 3-19.

Myers, N. (2008) Molecular Embodiments and the Body-work of Modeling in Protein Crystallography, *Social Studies of Science*, 38(2), 163-199.

Myers, N. (2015) Rendering life molecular: Models, modelers, and excitable matter, Durham, NC: Duke University Press.

Nabias, C. P. (2010) *Affect, Percept and Micro-brains: Art According to Gilles Deleuze,* (165-175). In: Neuroaesthetics. Can Science Explain Art, Portugal: Fim de Seculo. Available online at:

http://cfcul.fc.ul.pt/biblioteca/online/pdf/catarinanabibas/affectperceptmicrobrains.pdf Accessed 20th July 2020.

Nagengast, S. L., Baum, M. M., Megel, M. and Leibowitz, J. M. (1997) The Effects of the Presence of a Companion Animal on Physiological Arousal and Behavioral Distress in Children During a Physical Examination, *Journal of Pediatric Nursing*, 12(6), 323-330.

Navaro-Yashin, Y. (2010) Affective Spaces, Melancholic Objects: Ruination and the Production of Anthropological Knowledge. Malinswski Memorial Lecture. *Journal of the Royal Anthropological Institute*. 15(1), 1-18.

Nevins, R., Finch, S., Hickling, E. J., and Barnett, S. D. (2013) The Saratoga War-Horse project: a case study of the treatment of psychological distress in a vetran of Operation Iraqi Freedom, *Advances in Mind-Body Medicine*, 27(4), 22-25.

Ngui, M. (2013) Drawing A Thousand Plateaus. Available online at https://bumble-nut.com (Accessed: 17th October 2016).

Nimer, J. and. Lundahl, B. (2007) Animal-Assisted Therapy: A Meta-Analysis. *Anthrozoos*, 20(3), 225-238. doi: 10.2752/089279307X224773

Nippert-Eng, C. (2015) *Watching Closely,* Oxford and New York: Oxford University Press.

Nordtomme, S. (2012) Place, space and materiality for pedagogy in a kindergarten, *Education Inquiry*, 3(3), 317-333.

Nordstrom, S., Nordstrom, A. and Nordstrom, C. (2018) Guilty of Loving You: A Multispecies Narrative, *Qualitative Inquiry*, 1-8.

OECD. PISA 2015 Results (Volume III) 2015: Students' Well-Being. Paris: OECD, 2015. https://doi.org/10.1787/9789264273856-en

O'Haire, M. E., Guerin, N.A. and Kirkham, A.C. (2015) Animal-Assisted Intervention for trauma: a systematic literature review. *Frontiers in Psychology, 6.* 1121 doi: 10.3389/fpsyg.2015.01121

Olsson, L. M. (2009) Movement and Experimentation in Young Children's Learning: Deleuze and Guattari in Early Childhood Education, London: Routledge.

O'Neill, M. (2008) Transnational Refugees: The Transformative Role of Art. *Forum: Qualitative Social Research, 9*(2). Available at: http://nbn-resolv-ing.de/urn:nbn:de:0114-fqs0802590 (Accessed: 20th May 2017)

Orwell, G. (1945/2008) Animal Farm, London: Penguin Books.

Palmer, C. (2001) In: Cutter-Mackenzie-Knowles A., Malone K., Barratt Hacking E. (eds) *Research Handbook on Childhoodnature*, Switzerland: Springer International Handbooks of Education, Troubling Intersections of Childhood/Animals/Education: Narratives of Love, Life and Death, chapter 62, 1379-1394.

Parish-Plass, N. (2008) Animal-assisted therapy with children suffering from insecure attachment due to abuse and neglect: A method to lower the risk of intergenerational transmission of abuse? *Clinical Child Psychology and Psychiatry*, 13(1), 7-30.

Parviainen, J. (2003) Kinaesthetic Empathy, *Dialogue and Universalism*, 11-12, 151-162.

Pemberton, N. (2019) Cocreating guide dog partnerships: dog training and interdependence in 1930s America, *BMJ Medical Humanities*, 45(2), 92-101.

Perls, F. (1969) Gestalt Therapy Verbatim, Moab, UT: Real People.

Perls, F., Hefferline, R., and Goodman, P. (1951/1990) Gestalt therapy; Excitement and growth in the human personality, New York, Julian Press.

Perry, B. D. (2016) Stress and trauma inhibit students' ability to learn *Education Week*, 36(15), December 13, 2016, page 28.

Pets As Therapy, (2017) Read2Dogs. Available at: https://petaastherapy.org/what-we-do/read2dogs/ (Accessed October 17th 2016)

Piaget, J. (1983) Piaget's Theory, In: Mussen, P. (Ed.) *Handbook of Child Psychology*, Vol. 1 (pp103-128), New York, Wiley.

Pickering, A. (1995) *The mangle of practice: Time, agency and science*, Chicago, IL: University of Chicago Press.

Pile, S. (2010) Emotions and affect in recent human geography. *Transactions of the Institute of British Geographers*, *35*, 5-20.

Pink, S. (2009) *Doing Sensory Ethnography*, London: Sage.

Pink, S. (2011) From embodiment to emplacement: re-thinking competing bodies, senses and spatialities, *Sport, Education and Society*, 16(3), 343-355.

Pink, S. (2013) *Doing Visual Ethnography*, 3rd edition, London, Los Angeles, New Delhi, Singapore, Washington DC: Sage.

Polanyi, M. (1964) *Personal Knowledge: Towards a Post-critical Philosophy*, New York & Evanston: Harper and Row Publishers.

Power, E. (2008) Furry families: making a human-dog family through home, *Social and Cultural Geography*, 9(5), 535-555.

Powell, S. and Somerville, M. (2020) Drumming in excess and chaos: Music, Literacy and Sustainability in early years learning, *Journal of Childhood literacy*, 20(4), 839-861.

Pratt, M. L. (2008) *Imperial Eyes: Travel Writing and Transculturation*. 2nd edition, London and New York: Routledge.

Pratt, M. L. (1991) Arts of the Contact Zones. *Profession* 1991, 33-40.

Premack, D. and Woodruff, G. (1978) Does the chimpanzee have a theory of mind? *The Behavioral and Brain Sciences*, 4, 515-526. Available online at: https://carta.anthropogeny.org (Accessed: 20th May 2017).

Putnam, R. D. (1995) Bowling Alone: America's Declining Social Capital, *Journal of Democracy*, 6(1), 223-234.

Prout, A. (2005) *The Future of Childhood*. Abingdon, Oxon: Routledge Falmer.

Ramaekers, S. and Vandezande, A. (2013) 'Parents need to become independent problem solvers': a critical reading of the current parenting culture through the case of Triple P, *Ethics and Education*, 8:1, 77-88.

Ramirez-i-Olle, M. (2019) Friendship as a scientific method, *The Sociological Review Monographs*, 67(2), 299-317.

Ratelle, A. (2015) *Animality and Children's Literature and Film*, Hampshire and New York: Palgrave MacMillan.

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

Rederfer, L. A. and Goodman, J. F. (1989) Brief Report: Pet-facilitated therapy with autistic children, *Journal of Autism and Developmental Disorders*, 19, 461-467.

Rehn, T., McGowan, R. T. S., and Keeling (2013) Evaluating the Strange Situation Procedure (SSP) to Assess the Bond between Dogs and Humans, *PLoS ONE*, 8(2), 1-10. Available at: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3577677/pdf/pone.0056928 (Accessed: May 20th, 2016).

Rice, S. and Rud, A. G. (2016) *The Educational Significance of Human and Non-Human Animal Interactions*, London: Palgrave Macmillan.

Rodaway, P. (1994) Sensuous Geographies: Body, sense and place, London & New York: Routledge.

Roffe, J. and Stark, H. (2015) *Deleuze and the Non/Human,* Hampshire, UK, New York, USA: Palgrave Macmillan.

Rogoff, B. (2003) *The Cultural Nature of Human Development*, Oxford, New York: Oxford University Press.

Ronsdal, K. S. (2018) *Calling Bodies in Lived Spaces*. Gottingen: Vandenhoeck and Ruprecht Verlage.

Rose, N. (1999) *Governing the soul: The Shaping of the Private Self*, 2nd edition, London and New York: Free Association Books.

Rossini, M. (2006) To the Dogs: Companion Speciesism and the New Feminist Materialism, *Kritikos: An International and Interdisciplinary Journal of Postmodern Cultural Sound*, Text and Image, 3, 1-25.

Rowe, C. E. and Mac Isaac, D. S. (1989/1991) Empathic attunement: the "technique" of psychoanalytic self psychology, Lantham, Boulder, New York, Toronto, Oxford: Jason Aronson Books, Rowman and Littlefield Publishers.

RSPCA (2019) *Animals in schools.* Available at: https://education.rspca.org.uk/edu

Ruckenstein, M. (2010) Toying with the world: Children, virtual pets and the value of mobility. *Childhood*, 17(4), 500-513.

Ryan, R.M. and Deci, E. L. (2000) Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development and Well-Being. *American Psychologist*, 55(1): p. 68-78.

Sabanoglu, T. (2019) Pet ownership in the United Kingdom (UK) 2009-2016. Available at: http://www.statista.com/statistics/308235/estimated-pet-ownership-in (Accessed13 February 2020).

Sabar, S. (2013) What's a Gestalt? Gestalt Review, 17(1), 6-34.

Sams, M. J., Fortney, E. V. and Willenbring, S. (2006) Occupational therapy incorporating animals for children with autism: A pilot investigation, *The American Journal of Occupational Therapy*, 60(3), 268-274.

Sapir, E. (1928) The unconscious patterning of behavior in society, In: Drummer, E. S. (Ed.), *The unconscious*, (pp114-142), New York: Knopf

Sarup, M. (1993) *An introductory guide to poststructuralism and postmodernism.* Athens, GA: University of Georgia.

Saussure, F. D. (1974/2011) *Course in General Linguistics*, Trans. By W Baskin, New York, USA and West Sussex, UK: Columbia University Press.

Schafer, R. M. (1993) *The Soundscape: Our Sonic Environment and the Tuning of the World,* Rochester, VT: Destiny Books.

Schmitz, S. and Hoppner, G. (2014) Neurofeminism and feminist neuroscience: A critical review of contemporary brain research. *Frontiers in Human Neuroscience, Article 546*(8).

Schneider, M. S. and Pilchak Harley, L. (2006) How dogs influence the evaluation of psychotherapists, *Anthrozoos*, 19(2), 128-142.

Schoberl, I., Beetz, A., Solomon, J., Wedl, M., Gee, N., and Kotrschal, K. (2016) Social factors influencing cortisol modulation in dogs during a strange situation procedure, *Journal of Veterinary Behavior*, 11, 77-85.

Sellers, W. and Gough, N. (2010) Sharing outsider thinking: thinking (differently) with Deleuze in educational philosophy and curriculum inquiry. *International Journal of Qualitative Studies in Education*, 23(5), 589-614.

Sellers, M. (2015). ...working with (a) rhizoanalysis..and working (with) a rhizoanalysis. *An International Journal of Complexity and Education*, 12(1), 6-31.

Sellers, M. (2013) Young Children Becoming Curriculum: Deleuze, Te Whariki and curricular understandings. London and New York: Routledge.

Sexton, A. E., Hayes-Conroy, A., Sweet, E. L., Miele, M., & Ash, J. (2017) Better than text? Critical reflections on the practices of visceral methodologies in human geography. *Geoforum*, 82, 200-201.

Seyfert, R. (2012) Beyond Personal Feelings and Collective Emotions: Toward a Theory of Social Affect. *Theory, Culture and Society*, 29(6), 27-46.

Shapiro, K.J. (1990) Understanding Dogs through Kinesthetic Empathy Social Construction, and History. *Anthrozoos*, 3(3): 184-195.

Sheets-Johnstone, M. (2009) *The Corporeal Turn: An Interdisciplinary Reader*. Exeter, UK: Imprint Academic.

Shepherd, N. (1977/2014) *The Living Mountain,* Great Britain and USA: Canongate Books.

Shipman, P. (2010) The Animal Connection and Human Evolution, Current *Anthropology*, 51, 519-538.

Sidebottom, K. (2019) Chapter 13, Disruptive pedagogies for teacher education: The power of potential in posthuman times In: Taylor, C. A. and Bayley, A. (2019) *Posthumanism in Higher Education: Reimagining Pedagogy*, Switzerland: Palgrave. Practice and Research.

Siegel, J. M. (1990) Stressful life events and the use of physician services among the elderly: The moderating role of pet ownership, *Journal of Personality and Social Psychology*, 58, 1081-1086.

Signal, T., Taylor, N., Prentice, K., McDade, M. and Burke, K. J. (2017) Going to the dogs: A quasi-experimental assessment of animal assister therapy for children who have experienced abuse, *Applied Developmental Science*, 21(2), 81-93.

Silva, K., Correia, R., Lima, M., Magalhaes, A. and de Sousa, L. (2011) Can Dogs Prime Autistic Children for Therapy? Evidence from a Single Case Study, *The Journal of Alternative and Complementary Medicine*, 17(7), 655-659.

Simondson, G. (1969), In: Zdebik, J. (2012) *Deleuze and the Diagram*. London and New York: Bloomsbury Academic. (Chapter 1: 25).

Sloterdijk, P. (2011) *Bubbles. Spheres* I. (Translated by Weiland Hoban). Los Angeles, CA: Semiotext(e).

Smartt Gullion, J. (2018) *Diffractive Ethnography: Social Sciences and the Ontological Turn.* Abingdon, Oxon: Routledge.

Soper, K. (1995) What is nature? Culture, politics and the non-human, Cambridge, MA: Blackwell.

Sousanis, N. (2015) Unflattening. London: Harvard Press.

Sousanis, (2020) *Unflattening: Frames of Thought*, Comics Studies Research Webinar, Available at: https://youtu.be/jijRTZFmjZB4, Accessed 29th November 2020.

Spinoza, B. (1985) In: Deleuze, G. (1998) Essays Critical and Clinical, Translated by Daniel W. Smith and Michael, A. Greco, Chapter 17, 138-151, London and New York: Verso.

Stahl, P. W. (2016) Old dogs and new tricks: Recent developments in our understanding of the human-dog relationship. *Reviews in Anthropology*, 45(1), 51-68.

Stein, E. (1917/1989) In: Parviainen, J. (2003) Kinaesthetic Empathy, *Dialogue and Universalism*, 11-12, 151-162.

Stern, D. N. (1998) The Interpersonal World of the infant: A View from Psychoanalysis and Developmental Psychology. Oxon and New York: Routledge, 2018.

Stern, D. N. (2010) Forms of Vitality: Exploring Dynamic Experience in Psychology, the Arts, Psychotherapy and Development. Oxford: Oxford University Press.

Stewart, K. (2013) In: Knudsen, B. T. and Stage, C. (2015) *Affective Methodologies*, Hampshire, UK and New York, USA: Palgrave Macmillan. (Chapter 11: 227).

Stewart, L. A., Chang, C. Y. and Rice, R. (2013) Emergent Theory and Model Practice in Animal-Assisted Therapy in Counseling, *Journal of Creativity in Mental Health*, 8(4), 329-348.

St. Pierre, E. A. (1997) Circling the Text: Nomadic Writing Practices, *Qualitative Inquiry*, 3(4), 403-417.

Strom, K. J. and Martin, A. D. (2017) *Becoming-Teacher: A Rhizomatic Look at First-Year Teaching*. Rotterdam and Boston: Sense Publishers.

Stroufe, A. L., Coffino, B., and Carlson, E. A. (2010) Conceptualising the Role of Early Experience: lessons from the Minnesota Longitudinal Study, *Dev. Rev.* 30(1), 36-51.

Sutton-Smith, B. (1986) Toys as Culture, New York: Gardner Press.

Tammi T., Rautio P., Leinonen RM., Hohti R. (2020) Unearthing Withling(s): Children, Tweezers, and Worms and the Emergence of Joy and Suffering in a Kindergarten Yard, chapter 58, 1309-1339. In: Cutter-Mackenzie-Knowles A., Malone K., Barratt Hacking E. (Eds.) *Research Handbook on Childhoodnature*, Switzerland: Springer International Handbooks of Education.

Tarde, G. In: Tosti, G. (1897) The Sociological Theories of Gabriel Tarde, Political Science Quarterly, vol. 12(3) p.490-511 *JSTOR*, Available at: https://www.jstor.org.stable/2139668 (Accessed:11th December, 2016).

Taussig, M. (2011) *I swear I saw this: Drawings in fieldwork, namely my own.* London, Chicago: University of Chicago Press.

Taylor, A. (2011) Reconfiguring the Natures of Childhood, London: Routledge.

Taylor, C. (2013) In: Mcphie, J. (2019) *Mental Health and Wellbeing in the Anthropo-cene: A posthuman Inquiry*, Singapore: Palgrave Macmillan.

Taylor, A. and Pacini-Ketchabaw, V. (2017) Kids, racoons, and roos: awkward encounters and mixed affects, *Children's Geographies*, 15(2), 131-145.

Taylor, A. and Pacini-Ketchabaw, V. (2015) Learning with Children, Ants, and Worms in the Anthropocene: Towards a Common World Pedagogy of Multispecies Vulnerability", *Pedagogy, Culture and Society*, 23(4), 507-529.

Thrift, N. (2007) *Non-representational Theory: space, Politics and Affect.* London: Routledge.

Tipper, B. (2011) 'A dog I know quite well': everyday relationships between children and animals, *Children's Geographies*, 9(2), 145-165.

Tissen, I. H., A.; Spiel, C. (2015). School-Based Social Training with and without Dogs: Evaluation of Their Effectiveness, *Anthrozoos*, *20*(4), 365-373.

Tomkins, S. S. (1962) Affect, Imagery, Consciousness, Volume 1, The Positive Affects. New York: Springer.

Topal, J., Miklosi, A. and Csanyi, V. (1997) Dog-Human Relationship Affects Problem Solving Behavior in the Dog, *Anthrozoos*, 10(4), 214-224.

Topal, J., Miklosi, A., Csanyi, V., and Doka, A. (1998) Attachment behaviour in dogs (Canis familiaris): A new application of Ainsworth's (1969) Strange Situation Test, *Journal of Comparative Psychology*, 112(3), 219-229.

Topal, J. Gergely, G., Erdohegyi, A., Csibra, G., and Miklosi, A. (2009) Differential Sensitivity to Human Communication in Dogs, Wolves and Human Infants. *Science*, 325, 5945, 1269-1272.

Trevarthern, C. (Writer). (2011) In: The Connected Baby DVD S. Zeedyk and J. Robertson. In D. S. Zeedyk, and, & J. Robertson (Producer), "The rhythm and musicality of communication".

Trevarthern, C. (1999) Musicality and the intrinsic motive pulse: evidence from human psychobiology and infant communication, *Musicae Scientlae*, Special Issue, 1999-2000, 155-215.

Available at: https://journals.sagepub.com/doi/pdf/10.1177/10298649000030S109 (Accessed 17th October 2016).

Trut, L., Oskina, I. and Kharlamova, A. (2009) Animal evolution during domestication: The domesticated fox as a model. *Bioessays*, Mar 31(3), 349-360. Doi: 10.1002/bios.2008000070.

Tsing, A. L. (2005) *Friction: An ethnography of global connection*. Princeton and Oxford: Princeton University Press.

Tsing, A. L. (2012) Unruly Edges: Mushrooms as Companion Species for Donna Haraway, *Environmental Humanities*, 1, 141-154.

Tsing, A. L. (2015) *The Mushroom at the End of the World,* New Jersey, USA, Princeton University Press.

Uprichard, E. (2008) In: Watson, D., Emery, C., Bayliss, P., Boushel, M., and McInnes, K. (2012) *Children's Social and emotional wellbeing in schools: A critical perspective*, Bristol, UK and Chicago, USA: The Policy Press.

Valentine, G. (2010) Chapter 2, Children's Bodies an Absent Presence, 22-37. In: Horschelmann, K. and Colls, R. (2010) *Contested Bodies of Childhood and Youth*. Basingstoke: Palgrave Macmillan.

van Dooren,

T. and Rose, D. B. (2016) Lively Ethnography: Storying Animist Worlds, *Environmental Humanities*, 8(1), 77-94.

VanFleet, R. & Faa-Thomson, T. (2010) The Case for Using Animal Assisted Play Therapy, *British Journal of Play Therapy*, Vol. 6, pp4-18.

VanFleet, R., Fine, A.H., O'Callaghan, D., Mackintosh, T. and Gimeno, J. (2015) Chapter 12 Application of Animal-Assisted Interventions in Professional Settings: An Overview of Alternatives. In: Fine, A. H. *Handbook on Animal-Assisted Therapy*, 4th edn. San Diego and CA, USA: Academic Press, 157–177.

Van Maanen, J. (2011) *Tales of the Field: On Writing Ethnography*, 2nd Edition, Chicago and London: University of Chicago Press.

Vannini, P. (2015a) *Non-Representational Methodologies: Re-Envisioning Research*, New York and London: Routledge.

Vannini, P. (2015b) Non-representational ethnography: new ways of animating lifeworlds, *Cultural Geographies*, 22(2), 317-327.

Viau, R., Arsenault-Lapierre, G., Fecteay, S., Champage, N., Walker, C.D. and Lupien, S. (2010) Effect of service dogs on salivatiry cortisol secretion in autistic children, *Psychoneuroendocrinology*, 35, 1187-1193.

Von Uxekull, J. (1992) A Stroll Through the worlds of animals and men: a picture book of invisible worlds. *Semiotica*, 89(4), 319-391.

Vygotsky, L. (1986) In: Van Der Veer, R. And Valsiner, J. (1988) Lev Vygotsky and Pierre Janet: On the Origin of the Concept of Sociogenesis, *Developmental Review*, 8, 52-65.

Waddell, M. (2002) *Inside lives: psychoanalysis and the growth of the personality*. London: Karnac Books.

Walsh, F. (2009) Human-Animal Bonds II: The Role of Pets in Family Systems and Family Therapy, *Family Process*, *48*(4), 481-499.

Walters Esteves, S. and Stokes, T. (2008) Social Effects of a Dog's Presence on Children with Disabilities, *Anthrozoos*, 21(1), 5-15.

Wacquant, L. (2004) Body and Soul: Ethnographic notebooks of an apprentice-boxer. New York, NY: Oxford University Press.

Warfield, K. (2016) Making the Cut: An Agential Realist Examination of Selfies and Touch, *Social Media and Society*, 2(2), 1-10.

Watson, D., Emery, C., Bayliss, P., Boushel, M., and McInnes, K. (2012) *Children's Social and emotional wellbeing in schools: A critical perspective,* Bristol, UK and Chicago, USA: The Policy Press.

Weidi, M. and Kotrschal, K. (2009) Social and Individual components of animal contact in preschool children, *Anthrozoos*, 22, 383-396.

Weinfield, N. S. Stroufe, L. A., and Egeland, B. (2000) Attachment from infancy to early childhood in a high-risk sample: continuity, discontinuity, and their correlates, *Child Development*, May-Jun, 71(3), 695-702.

Wells, D. L., Lawson, S. W. and Siriwardena, A. N. (2008) Canine Responses to hypoglycaemia in patients with Type 1 Diabetes, *The Journal of Alternative and Complementary Medicine*, 14(10), 1235-1241.

Wells, D. L. (2009a) Associations Between Pet Ownership and Self-Reported Health Status in People Suffering from Chronic Fatigue Syndrome. *Journal of Alternative and Complementary Medicine*, *15*(4), 407-413.

Wells, D. L. (2009b) The Effects of Animals on Human Health and Well-Being, *Journal of Social Issues*, 65(3), 523-543.

Westgarth, C., Broody, L.M., Stratton, G., German, A.J., Gaskell, R.M., Coyne, K.P., Bundred, P., McCune, S. and Dawson, S. (2013) Pet ownership, dog types and attachment to pets in 9-10-year-old children in Liverpool, UK. *BMC Veterinary Research*, *9*(102), 1-10.

Westgarth, C., Heron, J., Ness, A.R., Bundred, P., Gaskell, R.M., Coyne, K.P., German, A.J., McCune, S. and Dawson, S. (2010) Family Pet Ownership during Childhood: Findings from a UK Birth Cohort and Implications for Public Health Research. *International Journal of Environmental Research and Public Health*, 7, 3704-3729.

Weston, F. (2010). Using animal assisted therapy with children, *British Journal of School Nursing*, *5*(7), 344-347.

Wetherall, M. (2012) Affect and Emotion; A New Social Science Understanding, London: Sage Publishing.

Whatmore, S. (1997) Dissecting the autonomous self: Hybrid cartographies for relational ethics, *Environment and Planning D: Society and Space*, 15, 37-53.

Whatmore, S. (2002) Hybrid geographies: Natures cultures spaces, London: Sage.

Whatmore, S. (2006) Materialist returns: practising cultural geography in and for a more-than-human world, *Cultural Geographies*, 13(4), 600-609.

Winnicott, D. W. (1958) The Capacity to be Alone, *Int. J. Psycho-Anal.*, 39, 416-420. Available at: https://pdfs.seman-ticsscholar.org/b491/33a8dcc46979911d506b75ca2407d787b74f.pdf (Accessed 4th June 2016)

Winnicott, D. W. (1971) *Playing with Reality*, London and New York, Routledge Classics, 2005.

Winnicott, D. W. (1975) *Through Paediatrics to Psycho-analysis*, New York: Basic Books

Williams, J. (2005) *Understanding Poststructuralism*, London and New York: Routledge.

Williams, H. and Pembroke, A. (1989) Sniffer dogs in melanoma clinic, *Lancet*, 1 (8640), 734.

Williams, G. and Searle, R. (1985) *The Complete Molesworth*, London: Pavillion Books.

Wilson, E. O. (1984) *Biophilia*, Cambridge, MA: Harvard University Press.

Wilson, C. C. (1991) The pet as anxiolytic intervention, *Journal of Nervous Mental Disorder*, *179*, p. 482-489.

Wolfe, C. (2003) *Zoontologies: The Question of the Animal*, Minneapolis, London: University of Minnesota Press.

Woodward, S. (2016) Object interviews, material imaginings and 'unsettling' methods: interdisciplinary approaches to understanding materials and material culture. *Qualitative Research*, 16(4), 359-374.

Woodyer, T. (2008) The body as a research tool: embodied practice and children's geographies, *Children's Geographies*, 6(4), 349-362.

Wolfe, C. (2003) Zoontologies: The Question of the Animal, Minneapolis: University of Minnesota Press.

Yoon, J. M. D. and Tennie, C. (2010) Contagious yawning: a reflection of empathy, mimicry, or contagion? *Animal Behaviour*, 79, e1-e3.

Young, T. and Bone, J. (2020) In: Cutter-Mackenzie-Knowles A., Malone K., Barratt Hacking E. (eds) *Research Handbook on Childhoodnature*, Switzerland: Springer International Handbooks of Education, Troubling Intersections of Childhood/Animals/Education: Narratives of Love, Life and Death, chapter 62, 1379-1394.

Zasloff, R. L., Hart, L.A. and DeArmond, H. (1999) Animals in Elementary School Education in California. *Journal of Applied Animal Welfare Science* 2(4), 347-357. Doi: 10.1207/s15327604jaws0204_8

Zdebik, J. (2012) *Deleuze and the Diagram*, London and New York: Bloomsbury Academic.

Zents, C. E., Fisk, A. K. and Lauback, C. W. (2016) Paws for Intervention: Perceptions About the Use of Dogs in Schools, *Journal of Creativity in Mental Health*, 12(1), 82-98.