

Electronic Thesis and Dissertation Repository

10-21-2022 2:00 PM

Creative Common Worlding with Research Creation in Early Childhood Education

Sarah M. Hennessy, *The University of Western Ontario*

Supervisor: Pacini-Ketchabaw, Veronica, *The University of Western Ontario*

A thesis submitted in partial fulfillment of the requirements for the Doctor of Philosophy degree in Education

© Sarah M. Hennessy 2022

Follow this and additional works at: <https://ir.lib.uwo.ca/etd>



Part of the [Art Practice Commons](#), [Curriculum and Instruction Commons](#), [Early Childhood Education Commons](#), [Educational Methods Commons](#), [Fine Arts Commons](#), and the [Nature and Society Relations Commons](#)

Recommended Citation

Hennessy, Sarah M., "Creative Common Worlding with Research Creation in Early Childhood Education" (2022). *Electronic Thesis and Dissertation Repository*. 8931.
<https://ir.lib.uwo.ca/etd/8931>

This Dissertation/Thesis is brought to you for free and open access by Scholarship@Western. It has been accepted for inclusion in Electronic Thesis and Dissertation Repository by an authorized administrator of Scholarship@Western. For more information, please contact wlsadmin@uwo.ca.

Abstract

Creative Common worlding with research-creation in early childhood education engages with provocations that disrupt dominant understandings of children and their relations with more-than-human and human others. Reconceptualizing alternatives through art, this dissertation contemplates the potent possibilities beyond human stewardship, underscores the influence of an uncommoning lens, and emphasizes the difficulties with humancentric notions of research. If, by disrupting how we understand ourselves and our role in place, we modify our actions and change our habits, then perhaps we can live differently and contribute differently to the planet. Through a common worlds framework together with research-creation, this dissertation considers climate education alternatives that emphasize the arts and combine academic research practices with creative and innovative experimentation in early childhood education.

The dissertation is divided into six distinct, but related, chapters. The second chapter focuses on the collaboration of pumpkin, weather, and children to build layered relations with the complexities of place. The third chapter focuses on walking and sketching as methods for forging relations with place, beyond written and spoken language. The experimentation with generating place relations continues with chapter four, an uncommon field guide originating with educators' and children's relations with a common world. The guide is an inclusive example of children thinking with, not learning about, a place. As a premise, the uncommon field guide considers the possibilities of guides, created with children, that focus on the realities of shared place, beyond positivist scientism habits that separate humans from nature.

The fifth chapter is the catalogue from the solo art exhibition *Inklings: Becoming with a Palette of Place*, a creative experimentation in building place relations through local, foraged materials for ink. This exhibition and catalogue engage in the creation of a palette of place and speculative inhabitants coalescing with the intimacy of colour, imagination, and alchemy.

The final chapter attends to how collaborative common worlding research in early childhood education together with art can inform and contribute to alternative approaches with a precarious planet.

Keywords: climate change, early childhood education, research-creation, common worlds, uncommoning, art, field guide, inklings

Abstract for the Lay Audience

Creative Common worlding with research-creation in early childhood education engages with provocations that disrupt dominant understandings of children and their relations with more-than-human and human others. Reconceptualizing alternatives through art, this thesis contemplates the potent possibilities beyond human stewardship, underscores the influence of an uncommon lens, and emphasizes the difficulties with humancentric notions of research. If, by disrupting how we understand ourselves and our role in place, we modify our actions and change our habits, then perhaps we can live differently and contribute differently to the planet. Through a common worlds framework, where humans are understood as part of nature, together with research-creation, this dissertation considers climate education alternatives that emphasize the arts and combine academic research practices with creative and innovative experimentation in early childhood education.

The thesis is divided into six distinct, but related, chapters. The first chapter reviews the research project. The second chapter focuses on the collaboration of pumpkin, weather, and children to build layered relations with the complexities of place. The third chapter focuses on walking and sketching as methods for forging relations with place, beyond written and spoken language. The experimentation with generating place relations continues with chapter four, an uncommon field guide originating with educators' and children's relations with a common world. The guide is an inclusive example of children thinking with, not learning about, a place. As a premise, the uncommon field guide considers the possibilities of guides, created with children, that focus on the realities of shared place, beyond positivist scientism habits that separate humans from nature.

The fifth chapter is the catalogue from the solo art exhibition *Inklings: Becoming with a Palette of Place*, a creative experimentation in building place relations through local, foraged materials for ink. This exhibition and catalogue engage in the creation of a palette of place and speculative inhabitants coalescing with the intimacy of colour, imagination, and alchemy.

The final chapter attends to how collaborative common worlding research in early childhood education together with art can inform and contribute to alternative approaches with a precarious planet.

Acknowledgments

Undertaking a PhD is a team effort. I am humbled by the team that supports me, my research, art, and education.

Children play an enormous role in my life and guide me, in part, in expanding my knowledge in education. My four directions—Muriel, Brodie, Gladstone, and Lyla—always allow me to join, play, and wonder with them, and they continue to guide me.

My four godlies (godchildren)—Charles, Amelia, Christopher, and Taylor—all now adults, shared their childhood journeys with me.

Out there in the world are seven years' worth of school-aged children who were part of Bruce Woodgreen's Room 8 world. Each and every one taught me and made being an early childhood educator such a fulfilling career.

I am grateful to the children, families, and early childhood educators at London Bridge who welcomed me into their centre and made the research such a fulfilling experience.

Thank you, Mum, for modelling a modern woman for me. Thank you for making my life so full of art and love.

Ashley and James, John and Lee, as my sisters and brothers, you surround me with a giant hug everywhere I go in this world. You are a constant source of strength. Your genius, creativity, tree/life/art/love is a part of everything I do.

Strachan, you remain the wise owl in my life standing beside me cheering me on.

I have collected amazing friends who deserve acknowledgement for their humour, wisdom, shoulders, knowledge, and adventurer spirits. Each of you is a treasure—Val, Jill, Chella, Cincie, Connie, Michelle, Adrienne, Carla, Kelly, Caitlin, and Janet.

As I finished my MA I knew I wasn't done with academia. Thank you Rachel Langford for welcoming me to reconceptualizing early childhood and introducing me to Veronica

Pacini-Ketchabaw. Thank you both for supporting my academic journey. Veronica, as a kind but firm guide, you have pushed me when I needed it and stood beside me when I faltered. You have welcomed me into the academic world and facilitated new connections, colleagues, and possibilities. If grad school is a team sport, you are the best coach.

Along with Veronica, Patrick Mahon, Rachel Heydon, and Mindy Blaise have guided me every step of the way as part of my thesis committee. Each of you willingly shared your expertise to refine my work. The supportive pushes and provocations each of you provided strengthened my work. Your hard questions and astute readings made me dig deeper.

I am thankful for a number of more-than-human friends, including the St. Lawrence River, my place beacon. My white spruce friend, located along the St. Lawrence River, connects me to past and future. Around that tree is a lawn of fragrant wild thyme. Together, my place relations begin with this river, tree, and thyme. Finally, I am thankful to this place of research now called London, Ontario. The pokeberry, wild grape, buckthorn, black walnut, goldenrod, pumpkin, pond, and forest worlds have taught me and informed my research enormously.

Coauthorship Statement

Chapter 2, *Watching Change: Attuning to the Tempo of Decay with Pumpkin, Weather, and Young Children*, is a published article that I coauthored with Tonya Rooney. I was the principal contributor and lead author of this paper. I assumed responsibility for 70% of the article, including conceptualization, field notes, writing, and publication.

This is an original manuscript of an article published by Taylor & Francis in *Children's Geographies* on November 23, 2021, available at:

<http://www.tandfonline.com/10.1080/14733285.2021.2007217>

Citation:

Hennessy, S. M., & Rooney, T. (2021). Watching change: Attuning to the tempo of decay with pumpkin, weather, and young children. *Children's Geographies*, 1–14.

Table of Contents

Abstract	i
Acknowledgments	v
Coauthorship Statement	vii
Table of Contents	viii
List of Figures	xi
Chapter 1. Introduction	1
1.1 The Precarious Times in Which We Live	1
1.2 Research Focus and Questions	1
1.3 Integrated Article Format	2
Article summaries	3
1.4 Conceptual Framework	6
Decentering the child in early childhood education	6
Natureculture and common worlds	6
Place-based pedagogy	8
Uncommoning	9
Environmental education	11
1.5 Research-Creation Methodology.....	13
Feminism in research-creation.....	13
The multimodal nature of research-creation	14
An open approach to experimentation	15
Creation-as-research	15
Place disrupted with creation-as-research.....	16
1.6 Research Design	17
Research site and participants	17
Research processes.....	18
Methods with children and educators	19
1.7 Data Analysis a.k.a. Uncanny and Rogue	26
1.8 Summarizing the Research with Propositions.....	27
Chapter 2. Watching Change: Attuning to the Tempo of Decay with Pumpkin, Weather, and Young Children	29
2.1 Introduction	31
2.2 Recognising Pumpkin-Weather-Child as a Collaboratory	32

2.3	Tempo, Weathering, and Decay	36
2.4	Ways of Learning: Fieldwork and Findings.....	39
2.5	Stories of the Pumpkin-Weather-Child Collaboratory	42
	Becoming acquainted.....	42
	Messy markings	43
	Pumpkin atmospheres	44
	Watching change.....	45
2.6	Breaking It Down: Final Discussion	47
2.7	Conclusion.....	50
Chapter 3. Anecdotal Edges: Propositions From Sketching the Walk as a Posthumanist Research Method		52
3.1	Introduction	54
3.2	Research with Place.....	56
3.3	Anecdotal Edges.....	57
	Anecdotal edges and sketching.....	60
	Anecdotal edges with walking	63
3.4	Wayfaring.....	65
3.5	Common Worlds	66
3.6	Relational Everyday Practices.....	68
	Process thinking.....	69
	Creeping language	70
3.7	Latour's Propositions	71
3.8	Conclusion.....	72
Chapter 4. An Uncommon Field Guide		74
4.1	Introduction	74
4.2	An Uncommon Field Guide	76
Chapter 5. Inklings: Becoming a Palette of Place Exhibit Catalogue.....		77
5.1	Preface	77
5.2	Inklings Exhibit Catalogue.....	78
Chapter 6: Conclusion.....		79
6.1	Implications of Research: Thoughts From Meeting Up.....	79
6.2	Research Questions	79
6.3	Thinking with Propositions	80
	Proposition 1: Disrupting boundaries	81
	Proposition 2: Uncommoning	83

Proposition 3: Re-envisioning cocreation	86
6.4 A Conclusion, For Now.....	87
References	90
Appendices.....	101
List of Appendices	101
Appendix A. Letter of Information and Consent (Families).....	102
Appendix C. Ethics Approval Letter	116
Appendix D. Continuing Ethics Approval.....	117
Appendix E. Confidentiality Agreement	118
Appendix F. Curriculum Vitae	120
Appendix G. An Uncommon Field Guide	125
Appendix H. Inklings: Becoming with Place Exhibition Catalogue	165

List of Figures

Figure 1.1. Pumpkin intersections. Author's photo, 2019.....	20
Figure 1.2. A palette of place. Foraged ink samples on paper, 2022.....	24
Figure 1.3. Ink method.....	25
Figure 3.1. Anecdotal Edges 1. Author's field book photo.	58
Figure 3.2. Anecdotal Edges 2. Author's field book photo.	59
Figure 3.3. Buckthorn, 2020.	61
Figure 3.4. Ghost, Acorn?, 2018.....	62
Figure 3.5. Bunny Tracks, 2018.....	64
Figure 3.6. (in)vulnerable?, 2019.....	67
Figure 3.7. Buckthorn Regenerated, 2020.	69

Chapter 1. Introduction

1.1 The Precarious Times in Which We Live

As climate change continues to impact the health and security, presents and futures of all earthlings, education is increasingly taking a proactive, participatory role in this growing social and political time of ecological insecurity (Common Worlds Research Collective, 2020). Yet, this increase in conversation about climate change is dominated by stewardship models in the complex field of environmental education (Taylor, 2017).

While children's engagement with climate change is growing, early childhood education is supporting new directions grounded in understandings of and emerging relations with more-than-human worlds. A more-than-human world is an approach of interwoven existences not focused on humans: In a more-than-human world, humans are part of the whole, not superior to or separate from other members. Current practices to interrupt climate change trajectories are not working (Polt, 2018; Tsing et al., 2017). Instead of environmental education focused on heroic human stewardship solutions, a common worlds framework supports children to think through their interrelations with the world (Common Worlds Research Collective, 2022; UNESCO, 2020) and think *with* the planet in complex and interconnected ways. In practice, ethical encounters within a more-than-human world supports children to think through their interrelations. A common worlds framework is the foundation of the research and this dissertation.

A common worlds research framework is paired with research-creation methodology that emphasize the arts as a way to research with climate change. Research-creation combines academic research practices with creative expression and innovative experimentation, asserting “a form of making that has traditionally been understood as expressive rather than analytically communicative” (Loveless, 2019, p. 29).

1.2 Research Focus and Questions

Engaged with common worlding ideas (Common Worlds Research Collective, 2022), my dissertation is an intersection of early childhood education, the arts, and research-creation

in pursuit of understanding alternative directions to support children’s relations with the world. My overarching goal was to begin a conversation between a research-creation approach and a common worlds framework in early childhood education that would support interrelations with a shared more-than-human world. To this end, three research questions encapsulate this research:

1. How might young children refigure place relations within their common world?
2. How might a research-creation methodology contribute to addressing precarious ecological times?
3. How might collaborations within a more-than-human world inform early childhood education?

I think of my work as a way of rethinking educational approaches to becoming with the world as it interrogates the often human-superiority principles of right and wrong, fact and fiction in favour of a “post-humanist ethics of relationality that allows for all that is human, non-human, organic, inorganic, alive, dead, yet to materialize, the virtual, and the real, to be a part of the practice that is ‘creative’ knowledge-making within the context of . . . environmental education” (Blyth & Meiring, 2018, p. 107).

1.3 Integrated Article Format

I engage with my research questions in a variety of ways. At its core, this dissertation is composed of two peer-reviewed publications (Hennessy & Rooney, 2021, Hennessy, in press), the solo-authored *An Uncommon Field Guide*, and a solo exhibition, *Inklings: Becoming a Palette of Place*, and its corresponding catalogue. Article 1 (Chapter 2), “Watching Change: Attuning to the Tempo of Decay with Pumpkin, Weather and Young Children” (Hennessy & Rooney, 2021) was published in *Children’s Geographies* with coauthor Tonya Rooney. Article 2 (Chapter 3), “Anecdotal Edges: Propositions from Sketching the Walk as a Posthumanist Research Method” (Hennessy, in press), is a solo publication included in the peer-reviewed book *Walking as Critical Inquiry* with editors Lasczik, Rousell, and Cutter-Mackenzie-Knowles. Chapter 4, also solo-authored, is *An Uncommon Field Guide*. The exhibit catalogue is included in Chapter 5. The exhibit took place at Western University’s Faculty of Education in the fall of 2022.

In this introductory chapter, I provide a brief description of each of the four chapters followed by a description of the major areas of my conceptual framework. I conclude with my methodology and corresponding methods, artistic process, and data analysis.

Article summaries

Chapter 2: Hennessy, S. M., & Rooney, T. (2021). Watching change: Attuning to the tempo of decay with pumpkin, weather, and young children. *Children's Geographies*, 1–14.

Article 1 follows a group of young children in an early childhood education setting and their growing acquaintance with a pumpkin over a five-month period. During this time, relations were forged among the pumpkin, weather, and the children, and as we observed these emerging relations, we, as educator-researcher adults, found ourselves attuning to the change of pace these relations brought to thinking and learning in the centre. We came to recognize this attunement as the work of a collaboratory. In this paper, we consider the resilience, practices, and demands that arose from being in the presence of a pumpkin-weather-child collaboratory. “Weathering” in this collaboratory interrupted and destabilized routine thinking. Pumpkins weather with wind, snow, sun, critters, and rain. Pumpkins also weather whims of human consumption and land management practices as they are reconfigured to meet the demands of human traditions. Children drew educators and researchers into noticing the shifts and tensions unfolding with the tempo of pumpkin decay. Working with a pumpkin-weather-child collaboratory brought opportunities to reconsider the politics and practices of tempo and change in working with children in early childhood education settings and beyond.

Chapter 3: Hennessy, S. (in press). Anecdotal edges: Propositions from sketching the walk as a posthumanist research method. In A. Lasczik, D. Rousell, & A. Cutter-Mackenzie-Knowles (Eds.), *Walking as critical inquiry*. Springer.

Reconciling the multidisciplinary nature of being a researcher and an artist is a place of tension. In moving away from the binary limits of research, this paper tracks the generative nature of walking and sketching as posthuman research methods. Over the course of numerous forest and community walks in conjunction with the Climate Action

Childhood Network research in early childhood education, language-based data collection was backgrounded in favour of a postqualitative, posthumanist zone of contemplation and questions (Lacy, 1995). In being drawn to draw the forest floor, strewn with pig-nosed nut shells, thistles, and bunny tracks, the process of sketching simultaneously became the doing of research (Grosz, 2001). During these common-worlds-informed walks with children, learning was something done *with* and *within* natures as opposed to something external we learned about (Latour, 2004). As an enmeshed and delicate process, this slow learning *with* required patience, sensorial listening, and defiance. Walking and the resulting sketches are political acts that demonstrate an unwillingness to be blindly, wholly complicit in the material, consumptive behaviours of anthropocentric culture and education. In framing these sketched walks, multitudinous enmeshed worlds at once precarious, dead, vibrant, struggling, thriving, political, and trampled became, first, anecdotal edges and later, propositions (Latour, 2004) in the creation of an uncommon field guide.

Chapter 4: An Uncommon Field Guide

An uncommon field guide is an invitation to become-with place. The stance, as invitation, is about thinking with, not learning about, a place. It is an inclusive approach to humans as part of nature. Traditional common field guides, which focus on scientific taxonomy practices associated with colonialism and resource inventorying habits, contribute to our global climate crisis by othering nature as a human possession to dominate. An uncommon field guide is an invitation, in part, to document a different way of building place relations and understanding humans as part of the nature of a place (Haraway, 2016). Informed by field experiences with children and educators, an uncommon field guide reconceptualizes place relations within common worlds (Taylor, 2017). If, by disrupting how we understand ourselves and our role in place, we modify our behaviours and change our habits, then perhaps we can live differently and contribute differently to the planet's climate.

Perhaps, if the guides we create with children focus on the realities of shared place, we can interrupt positivist scientism habits that separate us from nature. So far, human approaches to climate change that position us as separate and superior to nature don't

seem to be working. Focusing practice on thinking with nature in early childhood education allows us to consider new ways to be with the planet in light of climate change.

An Uncommon Field Guide is a pedagogical narration that brings my three research questions together. An Uncommon Field Guide is informed by the experiences, encounters, observations, and creations derived from becoming-with a specific place and the children and early childhood educators building place relations.

Chapter 5: Inklings exhibit and catalogue

As a creator, artist, and visual creature, creative expression is one of the ways that I know. Thus, artistic works are a cornerstone of my thesis, and research-creation my methodology. I have curated a collection of videos, sketches, paintings, collages, and photographs as sensorially significant moments from the research. The complete collection is attached as Exhibit Catalogue.

The exhibit works are composed of experiential art experiences with the children and educators and independent artistic engagements that provided a way of thinking and approaching the practice of research as a “directed exploration through creative processes that includes experimentation, but also analysis, critique, and a profound engagement with theory and questions of method” (Chapman & Sawchuk, 2015, p. 19).

The exhibition was held at Western University’s Faculty of Education in October 2022.

Chapter 6: Summarizing the research with pedagogical propositions

The final chapter of this thesis is a summary of the research through a lens of place, climate change, and research-creation. I use Latour’s (2004) propositions as moves away from imperative statements to a “realm of language now shared by humans and nonhumans alike” (p. 83) to consider, not conclude. Propositions shift away from conceptualizing human separateness from nature with statements of science (Latour, 2004).

The six chapters share a conceptual framework, which I outline below.

1.4 Conceptual Framework

In this section, I outline four contributing concepts in my conceptual framework. I begin with decentring the child in early childhood education. This is followed by Haraway's natureculture (2008) as it contributes to common worlds (Common Worlds Research Collective, 2022; Taylor, 2018; Pacini-Ketchabaw & Kummen, 2016). The final concept in the framework is uncommoning with the work of Stengers (2011, 2013) and de la Cadena and Blaser (2018). I conclude this section by orienting this framework as it relates to environmental education and connects to the precarious climate times we are living in.

Decentring the child in early childhood education

In Western discourse on early childhood education, developmental psychology dominates theoretical frameworks. Developmentalism, which views the child as “developing” and, by default, “not yet developed,” affects the way adults interact with children, children's dispositions as learners, and children's emerging identities (Kilderry, 2015). The overarching logic revolves around assessment of the individual child and their developmental domains. In centring individual children, a developmentalist-based education system focuses children on themselves and their needs, resulting in a human a priori approach to the planet. The resulting self-centredness generates a stewardship model that positions humans as the only ones capable of solving environmental problems (Haraway, 2008; Kopnina, 2014; Latour, 1993, 2011; Taylor, 2017).

Alongside this developmentalist thinking, Western discourse perpetuates Rousseau's romantic vision of the pure child paired with pure nature (Elliott & Young, 2016; Pacini-Ketchabaw & Taylor, 2015; Taylor, 2011, 2017; Taylor et al., 2013). Similarly, humancentric solutions to climate change education remain defaulted to models of sustainability and stewardship (Bryan, 2015; O'Malley, 2015; Stengers, 2013; Sweeney, 2015; Taylor, 2017).

Natureculture and common worlds

As with developmental psychology's dominance in early childhood education, environmental education has a dominant discourse—stewardship—that positions humans

as ecological problem solvers of a disparate nature in crisis. In opposition to stewardship models, this research is focused on the potential of Haraway's (2008) natureculture, a perspective where nature and human culture are positioned as inextricably enmeshed all around instead of romantically opposed. In keeping with natureculture and movements towards more-than-human thinking, a common worlds framework includes place-based pedagogies (Iorio et al., 2017; Samuelsson & Park, 2017; Smith et al., 2019; Styres, 2011; Watts, 2013) and the multispecies pedagogies of Pacini-Ketchabaw and Nxumalo (2016), Taylor (2017), and Woods et al. (2018). These various discourses are all built on a foundation of multiple viewpoints positioning more-than-humans and humans as dynamic in lifeworlds. These pedagogies are direct examples of movement towards the more-than-human in early childhood environmental education in considering place, nonhuman perspectives, and working and thinking with other species.

A common worlds framework is encapsulated by Taylor's (2018) explanation of childhood "as made and lived through entangled sets of non-innocent human and more-than-human relations indebted to the maxim of situated knowledges" (p. 207). It firmly decentres the human child and foregrounds more-than-human realities. Common worlds research engages in discourse with materials, energies, technologies, and more-than-human species, often attending to engagements of decentring the human, relationality, and more inclusive discourses in early childhood.

An ecocentric, common worlds approach in early childhood is an ethical redirect that involves a greater emphasis placed on the ethics of encounters and eco-ethics as caring for the more-than-human and the self together (Pacini-Ketchabaw et al., 2016). With common worlds, terminology of environmental education's sustainability is dismissed in favour of ways of supporting children to think through interrelations with the world. It is a removal of the hierarchy that places the human as superior. This re-understanding and repositioning of the human is clearly defined in Ritchie's (2012) *Early Childhood Education as a Site of Ecocentric Counter-Colonial Endeavour in Aotearoa New Zealand*. Ritchie describes the decentring of the human as

a form of relationality that differs from the binary dynamic of human dominance over nature, in that this view of relationality positions humans as cohabitants of a shared realm, reflecting the ethic of care and respect for the more-than-human world as something which humans are privileged to be in relation with. (p. 86)

In other words, the human-centred approach found in dominant discourses of environmental education repositions humans as cohabitants in a nonhierarchical natureculture. This research resides with the children's interrelations beyond humans in the flattened space of a common world.

With a common worlds approach, this research with children and their early childhood education includes place-relations, art, and kin. As the climate crisis defaults to science, government, adults, and words, with limited results, this dissertation is wondering, in part, about the possibilities of telling other stories and considering other ethics (King, 2003) of place in early childhood education.

With a common worlds approach, creeks, grasslands, gardens, and forests are a way of thinking called place-thought that engages issues of ethics and care within a more-than-human world (Watts, 2013). This stance on place disrupts ideas of pastoral perfection that perpetuate othering tendencies towards nature (Bolter, 2016), focusing instead on natureculture and the layered, complex, and messy.

Place-based pedagogy

Theoretically, the work within common worlds is primarily informed by place-based relations. No place has a single story, ever. Place is shared in any given moment and over longer geologic understandings (Bjornerud, 2018; Yusoff, 2018). Place has a long, complex spiritual and cultural significance with traditional Indigenous peoples and their worldviews (Smith et al., 2019).

In undertaking education and research on the land now called Canada in an era of truth and reconciliation¹, there is much wisdom to be gained in understanding Indigenous views of place. Smith, Tuck, and Yang (2019) describe place poetically and politically for educators, framing “land as literacy . . . [and] water as life” (p. 3). Building on the work of Benton-Banai’s (1988) *The Mishomis Book*, Sandra Styres (2011) frames the “land as first teacher . . . derived from a land-centred culture and based on *very old pedagogies*” (p. 717, original emphasis). As a settler on First Nations’ land, working to unsettle the frameworks of practice in early childhood education—frameworks guided by a dominant discourse of colonial, Euro-Western understandings of children, educators, and place—means considering the land as historied and political (Pacini-Ketchabaw & Taylor, 2015; Smith et al., 2019; Taylor, 2017). In the multistoried place, there are conflicting approaches to land, including respectful, inclusive Indigenous approaches and extractive, colonial frameworks. The colonial frameworks persist and form the foundation for a dominant neoliberal, commodity-based economic system on the land called Canada. As Germein (2017) reminds us, “Place is political. In carrying place with us we can resist choices and directions relating to place. . . . We consider the presents, pasts and futures of place (p. 226). The storied understandings of place carry wisdom and generative power in a common worlds approach.

Uncommoning

Uncommoning is a complex concept requiring a shift in understanding divergent relations for humans. Beginning from a general definition of common, uncommoning is informed by the thinking of both Stengers (2011, 2013) and de la Cadena and Blaser (2018) in complexifying relations. The term *common* evokes definitions of frequent occurrence or “the same in a lot of places or for a lot of people” (Cambridge Dictionary, 2020), often suggesting diminished status because of its frequency. In consideration of climate change, everything is at once common and uncommon: Fish are hybrids of plastics and fish, and rain is a toxic *mélange* of chemicals and water. A fish can be commonly labelled

¹ From 2007 to 2015 more than 6,500 testimonials were gathered from Inuit, Métis, and First Nations people to create a historical record of the residential school system and its devastating impact and ongoing legacy. The resulting report’s content and calls to action are a guide to further reconciliation between Canadians and Indigenous peoples (National Centre for Truth and Reconciliation, 2022).

a trout and classified scientifically. In uncommoning, this common trout becomes more-than-fish, for instance, a southwestern Ontario subdivision community, run-off-chemical and estrogen-infused micro-plastic pond trout. In uncommoning, the politics of relations are foregrounded. The hybridizing process in uncommoning is inherently incomplete as it is continually building place and story into speculative possibilities.

I use the term uncommoning in thinking with both Stengers (2011, 2013) and de la Cadena and Blaser (2018) on commoning and uncommoning and considerations of divergent needs. With Isabelle Stengers' (2011) commoning, the complexity of relations beyond common interests reflects the divergence of interests in relations. In thinking with Stengers' concepts of divergence, the focus becomes less reliant on the difference between, instead considering what happens with others in the between of difference. In other words, acknowledging a difference is a first step towards more complex, political, and active considerations with others in the space of difference. The result, in *An Uncommon Field Guide*, is an approach to what happens between species, materials, energies, and discourses with divergent needs.

Uncommons, with de la Cadena and Blaser (2018) builds on Stengers' (2011) thinking, politicizing the complex implications of divergent needs in a place. Uncommoning, conceptualized by de la Cadena and Blaser (2018), is having an interest in common but not necessarily the same interest as others. By way of example, wetlands are areas of interest to many, but not all for the same reason. For many species it is habitat. For water systems, wetlands are reservoirs. For farmers, wetlands are natural water treatment systems that filter impurities. For the manufacturing sector, wetlands are dumping grounds. Uncommoning is disruptive; it makes different what, on the surface, is considered similar. Uncommoning acts to complexify what is diminished by its frequency. Uncommoning interrupts concepts of a cursory view to label and classify something that demands, instead, closer and slower consideration. These deeper considerations engage with implications for and thinking with more-than-human others.

In frequenting the same places and engaging with the same materials, behaviours, and others in an early learning centre and surrounding community, what divergence of

commoning is happening? How do we attune to these divergences beyond a common interest of sharing the same area? How do we bring this complexity to the practice of early childhood care? In unravelling these questions with children in early childhood, I consider how to interrupt child-centred discourses that educate children to focus on individual selves (and correspondingly humans) as superior and separate from nature. As a process, the creation of an uncommon field guide is predicated on the belief of the divergent abundance of common.

Decentering the child in early childhood education as part of common worlds approach to education means situating this approach in environmental education. In reality, the common worlds approach goes against environmental education where humans remain outside of said environment.

Environmental education

Within the behemoth of environmental education, there are a variety of approaches. Natureculture, common worlds, and uncommoning are theoretically related moves that diverge from developmentally based, humancentric education for sustainable development and move towards posthuman-informed education for sustainability (Ärlemalm-Hagsér & Sandberg, 2011; Inoue et al., 2016). A key difference in these two tracks within environmental education is the word development. Development carries a double meaning, referencing both developmental pedagogies (Ärlemalm-Hagsér & Sandberg, 2011) and human material-consumptive behaviours of a Western neoliberal system (Hägglund & Samuelsson, 2009). As an environmental education trend, education for sustainable development remains focused on human needs as foundational, acknowledging that environmental education is about “preparing future generations for sustainable life on the planet” (Pearson & Degotardi, 2009, p. 104). With this trend in environmental education, the human remains positioned as superior and central.

While it is not completely different in approach from education for sustainable development, education for sustainability employs a posthumanist framework of more-than-human interrelations. Of particular interest is the 2016 study by Inoue, O’Gorman, and Davis titled *Investigating Early Childhood Teachers’ Understanding of and*

Practices in Education for Sustainability in Queensland. In particular, the authors addressed the need for a “broader view of sustainability [that] should prompt educators to create pedagogical environments and plan learning activities that enhance children’s awareness of ecosystems, environmental issues, and relationships between humans and nature” (p. 177). While the human centrality in environmental education is not definitively repositioned, reference to the relationships between humans and nature indicates a progression towards the more-than-human (Wals, 2017).

Recently the United Nations Educational, Scientific, and Cultural Organization (UNESCO) commissioned the report *Learning to Become With the World: Education for Future Survival* from the Common Worlds Research Collective (2020). The report pointedly states that “attempts to achieve sustainable futures that continue to separate humans off from the rest of the world are delusional and futile” (p. 2). As part of declarations towards reshaping education by 2050, the report’s authors position humans as ecological beings requiring an education system that moves beyond the limits of social understandings. This report goes beyond education for sustainability’s focus on the relationships between humans and nature, instead imploring education to teach that “agency is relational, collectively distributed, and more-than-human” (p. 5) as part of collective and reciprocal relations. Declaration 5 insists that “learning to become with the world is a situated practice and a more-than-human pedagogical collaboration” (p. 7); this principle is illustrated in my thesis through the collaboratory work with pumpkin, weather, and young children (Chapter 2), uncommoning a field guide (Chapter 4), and sketching walks (Chapter 3) within shared worlds. This thesis builds on the more-than-human pedagogical documentation of Taylor & Pacini-Ketchabaw (2018), Pacini-Ketchabaw et al. (2016), Blaise et al. (2017), Taylor (2019), and the work of countless members of the Common Worlds Research Collective (2022). This thesis joins a growing body of work that moves beyond “children’s awareness of ecosystems, environmental issues, and relationships between humans and nature” (Inoue et al., 2016, p. 177) and awareness of an othered nature to the implicated, relational realities of shared worlds and climate trajectories.

As a member of the global Common Worlds Research Collective, my research joins a growing body of work informing education, policy, and relations with the planet.

1.5 Research-Creation Methodology

My onto-epistemological way of learning and being has always included the creation of art and informs my choice of methodology as research-creation. Research-creation, as defined by the Social Sciences and Humanities Research Council of Canada (2016), is “an approach to research that combines creative and academic research practices, and supports the development of knowledge and innovation through artistic expression, scholarly investigation, and experimentation” (Loveless, 2019, p. 6). This methodology made sense for me as an artist-researcher with a common worlds approach.

Creation-as-research, one of four distinct ways of enacting research-creation, connects with an uncommon field guide as it “elaborate[s] projects where creation is required in order for research to emerge” (Chapman & Sawchuk, 2012, p. 19). For the purposes of my research, I am informed by specific elements of research-creation, including its feminist stance, multimodal nature, open approach to experimentation, and specific category of creation-as-research.

In this methodology section I begin by detailing feminist, multimodal, and experimental elements that connect with my research. This is followed by an explanation of creation-as-research as a specific form of research-creation and its connection to research with place. The second section is focused on the two distinct creative approaches with this research: one, with children and educators at the research site, and the second, my individual artistic process. The section concludes with a summary of the research methods.

Feminism in research-creation

Research-creation directly connects to feminisms and histories of the “denigration of certain forms of work” and “certain vocalities” (Loveless, 2019, p. 29). Research-creation is, first, a challenge by equalizing creative work as research and data, and, second, a political act because it disrupts traditions that “draw their power from seeing certain kinds of research as nonresearch” (Loveless, 2019, p. 29). Overcoming historic bias

towards arts-based creation in research makes research-creation a broad feminist methodology for marginalized peoples and practices. Enacting ways of researching that include artistic expression are part of the social change in feminist methodologies (Doucet & Mauthner, 2006).

The feminist foundations of research-creation connect directly to the reality of early childhood education's female workforce and the social framings of this work. I activate research-creation in early childhood education, a feminized field of care work (Langford, 2019). Drawing from the thinkings of feminist new materialists and the Common Worlds Research Collective (2022), my research draws on a vocality that "assert[s] a form of making that has traditionally been understood as expressive rather than analytically communicative" (Loveless, p. 29). The result is conceptualizing the acts of creative expression as creative-political-ethical expressions of place and the complexities entailed. This means that artistic expression is both analysis and creative expression. In an uncommon field guide, sketches of plants growing through imposed asphalt pathways become art, commentary, and provocation towards other ways of thinking with the implications of enmeshed lives.

The multimodal nature of research-creation

In blending research expressions through a variety of written and creative communication practices, research-creation is multimodal. Both Loveless (2019) and Chapman and Sawchuk (2012) argue that research-creation necessitates multimodalities because of how multimodalities remove hierarchies with writing and art. In blending different modalities, research becomes a collage embodying openness to mediums of expression with data collected, found, generated, and identified in written and art narratives. My research activates multimodality by engaging aural, audio, and spatial modes that blend language and writing with drawing, mixed media collage, and painting. Through experiential walks and art experiences, creative data using sound, image, and writing were combined to create uncommon field guide entries to communicate data through a variety of modes.

An open approach to experimentation

Research-creation takes an open approach to experimentation, bridging diverse forms of art inquiry including performance, digital, literary, and visual arts as a relationship between arts and qualitative research. In crafting my research within ecologically precarious times, an approach to open experimentation allowed the research to exist in what DeLanda (2016) refers to as “possibility spaces” (p. 178). These alternative spaces “move beyond the orthodox of standardized research practices to open ways of thinking, doing and expressing” (Sinner et al., 2019, p. 4) as unfolding experiences. With my research I activate the unfolding natures of place through experimentation that is not-yet-known, mirroring both original creation in art and inquiry-based learning in early childhood education. Finally, an open approach to experimentation connects with in-situ thinkings *with* and the inspiration that comes from developing relationships with place.

Creation-as-research

Chapman and Sawchuk (2012) describe four categories of research-creation: research-from-creation, research-for-creation, creative presentations of research, and creation-as-research. Creation-from-research (generating data from art to inform design or testing such as audience experiences of an art installation), research-for-creation (a gathering of data to inform future creative research endeavours), and creative presentations of research (a creative presentation of traditional academic research findings) all engage creative, arts-based practices in research. I engage with the fourth category, creation-as-research, defined by Chapman and Sawchuk (2015) as a way of thinking and approaching the practice of research as a “directed exploration through creative processes that includes experimentation, but also analysis, critique, and a profound engagement with theory and questions of method” (p. 19). Because of the hybridity of creation and experimentation with analysis, critique, and theory, my research engages a variety of methods such as art, walking, and pedagogical documentation to foreground pedagogical practice informed by common worlds theory regarding the current early childhood education experience in relation to a specific place.

Place disrupted with creation-as-research

Creation-as-research complements practices of disrupting binaries through experimentation by introducing alternatives for practice and theory in early childhood education. Undertaking art, as a way of knowing and being, disrupts thinking of art as an object or product to be placed, by others, in a traditional hierarchy of knowledge below the measured and the written. Natalie Loveless's (2019) seminal book *How To Make Art at the End of the World: A Manifesto for Research-Creation* resists binaric thinking about research or art, where art is almost always diminished. Asking, "How will this artistic output forward the research question[s] at the heart of my thesis?" (Loveless, p. 11) breaks down binaric positions of art and research. I echo this question, asking how artistic approaches can inform different ways of knowing place.

Loveless's (2019) title language of the "end of the world" references Timothy Morton's (2013) work on the *hyperobjectivity of global warming*. Climate change, as a global concept, is monumental in size. Instead of thinking with this enormity, the creation of a place-specific field guide for precarious planetary times allows critique and theory to foreground uncomfortable realities of urbanization, pollution, and plastics in a way that builds on Stengers' (2011) and de la Cadena and Blaser's (2018) uncommoning. In focusing on a specific place, an uncommon field guide brings climate change realities to a local, intimate scale. In considering an uncommon field guide for precarious times, I think with Loveless's consideration: "'How might the world be organized differently?' a question that matters urgently . . . is a question that art—particularly art attuned to human and more-than-human social justice—asks in generative and complex ways" (p. 16). The result is a pairing of research-creation with an uncommon field guide as a way of researching and bringing the human impact on the planet to a specific local place in a field guide.

A final thinking with the methodology of research-creation is with Shari Tishman's book *Slow Looking* (2018) and the connections research-creation brings to ways of researching. In slowing down as practice, for instance, attunement to "discern multiple ways that things are complex" (Tishman, 2018, p. 125) becomes possible. This matters because

thinking slowly, as an orientation, and I daresay as a way of practising responsibility (Haraway, 2008) in research-creation,

encourages modes of *temporal* and *material* attunement within the academy that require slowing down in a way that does not fetishize the slow but in which slowness comes from the work of defamiliarization and the time it takes to *ask questions differently*. Research-creation, at its best, has the capacity to impact our social and material conditions, not by offering more facts, differently figured, but by finding ways, through aesthetic encounters and events, to persuade us to care and care *differently*. (Loveless, 2019, p. 107, original emphasis)

The lack of familiarity that comes with slowness enables an opening to the uncommon of sharing and the layers of connection and divergence with others.

1.6 Research Design

My research took place in what is currently known as London, Ontario, Canada, on the traditional territories of the Anishinaabek, Haudenosaunee, Lūnaapéewak, and Chonnonton peoples.

In this section, I detail the research site and participants, summarize the research process, and identify the various methods implemented with children and educators and as part of my own artistic process.

Research site and participants

The research took place in an early learning centre located in a primary school in a developing neighbourhood in the place currently known as London, Ontario, Canada. The research site includes the local area surrounding a new suburban development.

The participants were members of the infant room at the early learning centre, with 12 children ranging in age from 6 months to 1.5 years and five early childhood educators. (See Appendices A and B for letters of information and consent that were provided to the participating families and educators.) The research with children and educators at the centre occurred between September 2018 and February 2020. Their participation was

covered by existing ethics approval related to my supervisor Veronica Pacini-Ketchabaw's Social Sciences and Humanities Research Council of Canada funded project, Climate Action Network (see Appendices A, B, C, and D for ethics approval and letters of information and consent and Appendix E for confidentiality agreement). The Climate Action Network (CAN) project (<https://climateactionchildhood.net/>) is an international collaboratory researching climate change pedagogies with young children.

In addition to the human participants (children and early childhood educators), more-than-human participants included a variety of species, materials and energies sharing place with the early learning centre. The surrounding area is a blended landscape that includes a local forest stand, a pond, railway, farming fields, newly constructed single-family homes, and additional homes under construction. Condominium towers, roadways, and urban infrastructure border active farms, forming and informing the worlds of this community. The land carries varied and complicated histories of urban sprawl spilling onto farm fields (tended by generations of settlers after displacing Indigenous peoples, whose thousands of years of relations with this same land continue.

Ecologically, I locate this work beyond a humanist science of facts to encompass more-than-human, more-than living worlds. Ethically, this research is understood and approached as a partnership with others—animals, insects, plants, energy, weather, water, land, air, and other humans.

Research processes

The on-site research used a flexible format of immersive site visits, conversational sessions with educators, engagement with pedagogical narrations during weekly visits, and four week-long intensive visits (Cohen et al., 2011; Hodgins et al., 2019). With each weekly visit, I joined the infant program and the routine. Throughout the visit, we (educators, children, and researchers) undertook a variety of experiences indoors and outside. Many of the visits consisted of neighbourhood walks, including visits with the pond and forest nearby. Building relationships with children and educators was an important part of each visit. I actively participated in the program with educators and children during these visits.

Throughout the visits, I engaged in informal, in-program pedagogical discussions with educators regarding their thinking, planning, and observations. This dialogue was extended in regular out-of-program meetings, emails, and the exchange of written observations.

As part of a developing relationship, I supported educators both as an atelierista (by contributing experiential creative concepts) and as a pedagogist (by providing readings and prompts for reflection).

Methods with children and educators

The methods I used with children and educators included immersive, experimental art experiences, walking, observations through the “arts of noticing” (Tsing, 2015), and pedagogical narration. These four methods align with a common worlds framework and research-creation methodology. They are also implementable methods in an active infant room.

Immersive, experimental art experiences. Transformative relations through and with art are a reminder of the creative potential found in ethical engagement. I understand the arts as “integral aspects of children’s daily inquiries, explorations and learning” (Kind, 2010, p. 113). In other words, the arts are a way to be, to learn, and to become, and they are one of the many languages of children (Edwards et al., 1998). The approach to immersive experiences included creating a dynamic space of disequilibrium and spontaneity. The sensorially immersive experiences transform representative ideas and facts to evoke surprising, unexpected, and even unsought ways (O’Sullivan, 2005).

A number of immersive environments were provided over the course of the research. By way of example, during sound experiences, the room was cleared except for those items that generated or conveyed sound. Footage of previous sound experiences was projected on the walls with corresponding audio immersion. Once attuned to sound, children recognized the sounds of others’ breath, rain on the window, and the wheels of the lunch delivery cart.

Materially, immersion is often as much about removing as adding materials for art: Clearing the clutter of predictable early childhood toys and materials to focus with paper and charcoal generated both disequilibrium and spontaneity. Immersion extended to educators and researchers as well, allowing for a slowing down and observing closely with, as provocation to different thinking and thinking beyond human-as-central models (Blaise et al., 2017).

The term *art experiences* is understood as creative engagements beyond a skills-based developmental activity producing representational products. The art experiences occurred indoors and out. They happened while the participants were walking or strolling. They happened on the path, the sidewalk, the parking lot, the forest, and the lawn. They occurred as nonverbal conversations, or through videos, and sometimes they extended over multiple months. Art, as provocations, inquiries, and collective spells of experience, was hands inside decomposing pumpkins, squeaking charcoal as we made marks, dancing hands through air, and watching the performance of water drips on the sidewalk after the rain.

Some experiences were purposefully designed, but others were momentary chance encounters. After more than a month of living with a decaying pumpkin, attempts to paint with pumpkin led to an open pumpkin and hands dipping inside to return orange. Spontaneously orange hands became imprints of the experience (Figure 1.1).



Figure 1.1. Pumpkin intersections. Author's photo, 2019.

Art experiences included encounters with water, charcoal, cardboard, sound, pumpkins, berries, vines, and paint, newly or differently presented. Many of the art experiences produced no product other than process documentation as videos, sound files, photos, journal entries, quotes from children, sketches, and regenerated sketches.

Walking. Walking is a generative practice that “brings attention to the landscape . . . [providing for] patterns, paces and paths of walking as experienced in the breath, rhythm, sweat and memory of the walker” (Myers, 2010, p. 59). The series of weekly walks included visits to forest stands, pond, grassland, playground, parking lot, and neighbourhood. Walking in and *with* the ecosystem foregrounds the sensorial part of experiences. For McClintock (1994), walking is a “common action become uncommon” (p. 95) evoking spiritual, sensorial, and aesthetic thinking beyond the simplicity of one foot in front of the other. This was important in my research, being an inclusive and shared way of existing with more-than-humans. The walks, as a slow, embodied act of attunement (Pacini-Ketchabaw et al., 2016; Tsing, 2015) informed art experiences, generated dialogue, and ignited “sparks” for engagement with(in) entangled, ever-changing worlds.

Observations through the arts of noticing. Anna Tsing (2015) practices a specific kind of noticing that informed my position as researcher within the research and the participants’ common worlds as a subjective, noninnocent participant. In creating an uncommon field guide, the arts of noticing counter field guide traditions of rational, verifiable positivism. Photography, video, sketching, and journalling become a collage of field notes and conversations bringing the complexity of stories, histories, and divergence and foregrounding implications with actions, thoughts, and behaviours.

Pedagogical narration. Pedagogical narration, or documentation, a process “for making pedagogical (or other) work visible and subject to dialogue, interpretation, contestation and transformation” (Dahlberg et al., 2013, p. 225), was used to collectively dialogue, interpret, contest, and transform the data from the walking, noticing, and art experiences. In purposefully entangling the visual arts, art/to/be and more-than-human participants, I engaged with opportunities to tell other stories in the field guide (King, 2003). These

pedagogical stories, which made visible the choices we made (Hodgins et al., 2019), informed both written and art-based content in the field guide.

With educators and children, presentations, posters, and books were involved in pedagogical engagements to understand the entangled reality of experiences, address disequilibrium, and rethink with the planet and climate change. Pedagogical engagements were also sensory challenges, stained snowsuits, and emptied rooms refilled with charcoal and paper as ongoing testaments to differently achieving the quote from Dahlberg et al. in the previous paragraph.

Kinscape creative process. It is difficult to separate artworks with children and educators from place, more-than-human kin, and personal works with kinscapes. In this research all of the artwork was informed by experiences with a specific place, its more-than-human kin, and the participating human children, educators, and me. Within a common worlds framework, the entwined nature of more-than-human worlds works to blur and dissolve othering boundaries of adult-child, educator-researcher, artist-academic, plant-animal, and human-nature. In a common world all are kin. To differentiate the two approaches with art is to first qualify all as material intra-actions with more-than-humans. In some cases, the humans included educators and children. In this section, the focus is my artistic process with kin beyond the centre, children, and educators.

Much of my creative work took place after the site research as part of processing and synthesizing research data during the pandemic. Creative expressions were part of each stage of this research and are part of each chapter of this dissertation. They are process works, occurring in the margins of field notes, as final, signed works for the thesis exhibition, and as various iterations in between. Many of the works can be viewed as “a way of transforming invisible experience into visible, material and embodied knowledge” (Anderson, 2019, p. 20) contributing as theoretical manifestations.

The manifestations are a heterogeneous mix ranging from pen and pencil sketches, collages, ink watercolours, videos, computer-modified photos, and original photographs. The transparent layering, as evidenced by “Uncommon Buckthorn” and “Shadow Place

(for Val)” in Chapters 4 and 5, embeds municipal, aerial photographs with ink collages to visually convey real connections of uncommoning.

Computer-modified photos in “Ghost, Acorn?” (Chapter 4) helped build speculative possibilities mutating from the known to possible unknowns. Pencil and ink sketches, as found in Chapters 3, 4, and 5, emanated from field notes in real time in the field or classroom, playground, or pond. “Follow” and “Entwined” in Chapter 4 contributed as photographs requiring viewers/readers to imagine following lines of fingers drawing.

Videos play important and varied roles in the creative works. With “Fish Drain” and “Sonic Pebbles” (Chapter 4, 5) the QR codes provide viewers/readers/listeners to access the original video data. In “Narrating With” (Chapter 5), the video is a dialogue with ink, with the viewer, with self, and with curriculum, narrating in real time the creation of a work.

Perhaps most present in the research-creation are the natural, foraged, and created inks with the place of study. I refer to this as a palette of place, as it denotes the intimacy of ethically working with a place to generate small batches of colour as a way to materially engage with the place.

A palette of place. As a material starting point, inks have celebrity status as contributors to human development. Animal-, plant-, and mineral-derived inks have been tied to human representations of art and writing for tens of thousands of years. While it is entirely feasible to source pigments from every corner of the planet, the palette for this thesis was foraged locally by me as part of acquaintance building with this place. Each colour—purple, green, yellow, pink, blue, red, turquoise, and brown—colours this kinscape (Vowel, 2022). Colour, as a verb, evokes the active populating of interrogations, dialogues, and relations over time and with others. The colours continue to intra-act (Barad, 2007; Davies, 2014; Lenz Taguchi, 2010) beyond this thesis, exhibition, or research (Chapter 5).

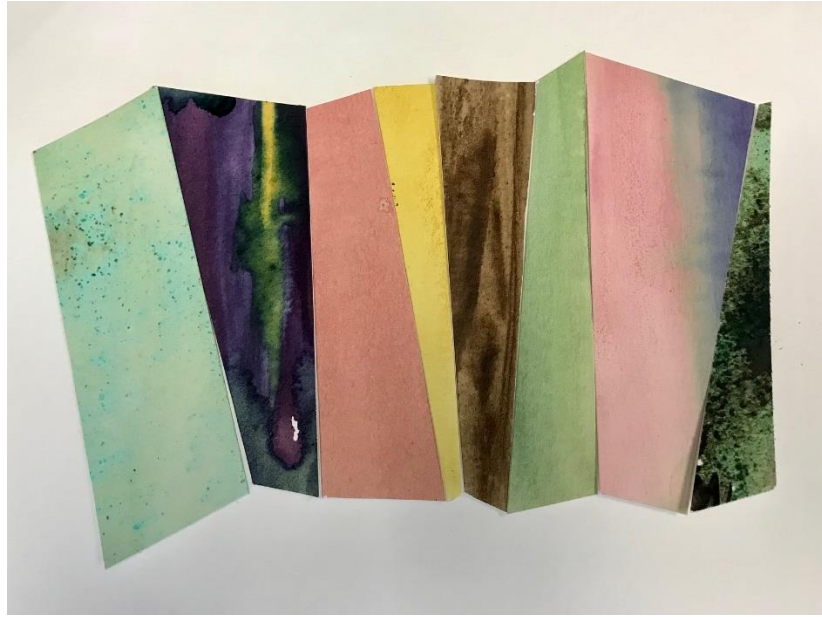


Figure 1.2. A palette of place. Foraged ink samples on paper, 2022.

From left to right: rusted copper, goldenrod and wild grape, sumac, goldenrod, black walnut, buckthorn, pokeberry with wild grape, rusted copper infused with buckthorn.

From the field observations of children’s stained hands from pumpkins, buckthorn, wild grape, and more came the realization—artistically, aesthetically, and educationally—of the power of natural ink as a material to follow and learn from. As *Make Ink* author Jason Logan (2018) indicates, “inkmaking is easiest when you are patient and remain open to everything” (p. 24). His words resonate with Anna Tsing’s (2015) arts of noticing and a common worlds approach to thinking with place (Common Worlds Research Collective, 2022) and the value of trying to ascertain how “artistic output [can] forward the research question[s] at the heart of my thesis” (Loveless, 2019, p. 11). In foraging, creating, and using ink, my material becomes the doing of research and adheres to the integrity of both common worlds and research-creation.

Foraged natural inks became an emergent method during the research. From the orange of decaying pumpkin came handprint recognition of becoming-with for many children (Chapter 2). This recognition was further informed through wild grapes, black walnut, and buckthorn.

Once ink emerged as a method, ink’s staining properties became a way to research with a palette and place. As Victoria Finlay (2007) explains, “colour is not something that a substance ‘has’, but rather something that it ‘does’”(p. 6). Inks, as a palette of place, are endogenous to the kinscape emerging from the withinness. What was colour doing in this place? In uncommoning (de la Cadena & Blaser, 2018; Stengers, 2011, 2013), the answer depends on a multitude of factors. A human understanding is one of many ways to see a colour. Whose eyes were seeing the colour and how did they see that colour? As Logan (2018) suggests, “pigmentation plays all different kinds of roles depending on type of plant, time of year, and even soil type. Pigments can act as a natural pesticide, a lure for pollenating insects, or a last gasp of colour before dying. . . . [Pigments] can signal edibility or poison”(p. 33).

Creating foraged inks is an intimate, immersive process. It is a slow, attentive reconnoitering of place in combination with keen eyes, an inquisitive nature, and a willingness to get messy with branches, ticks, and colour. In the sensorial listening with feet, fingertips, ears, knees, tastebuds, and olfactory sensors, the tries and fails with alchemy are ways of visualizing-with.



Figure 1.3. Ink method.

- a. *Foraging a palette.* Photo of author, 2020, courtesy of M. Agarwal (used with permission).
- b. *Timing grape harvest.* The plant has shed its leaves to reveal the remaining over-ripe berries. Author’s Photo, October 13, 2020.
- c. *Ethical amount.* Gathering only enough for ink. Author’s photo, October 13, 2020.
- d. *Making ink.* Raw colour before cooking. Author’s photo, October 13, 2020.
- e. *Ink test.* Sample ink on paper. Author’s photo, October 13, 2020.

The ink-making method is physical, emotional, and creative work. Inks can be fragile and retain “best before” dates, especially for sugar-rich materials like grapes. Care for the

source (take only what is essential), those dependent on it (birds, squirrels, etc.), and use (towards building ethical place relations) align with a common worlds approach and a research-creation methodology.

1.7 Data Analysis a.k.a. Uncanny and Rogue

I found myself with audiovisual data generated from a more-than-human world. In these cases there were no words, humans, or transcripts to call data or to analyze. To address data analysis, I think with Katherine McKittrick (2020), who suggests in *Dear Science and Other Stories* that “methodology must be disobedient and undisciplined (rogue, rebellious, ill behaved, black)” (p. 44). I would add to this approach to methodology by suggesting that data analysis also be open, creative, and even antagonistic (Culhane & Elliott, 2017; Truman, 2022). In considering alternatives, antagonizing the status quo helps to tease out the new, speculate on the possible, and widen the lens to embrace the uncommon.

Research-creation, as an “uncanny practice” (Loveless, 2019, p. 47; Royle, 2003) carries an unspoken request for both data and analysis to be considered differently. With uncanny practice, something familiar is unsettled. The state of responsive reorienting with the unfamiliar is generative. When the familiar becomes unfamiliar we ask, what is happening? The flux of challenging the status quo is a generative space for contemplating otherwise.

A possible description of how data analysis was approached for this research sits with curiosity and what curiosity does, what it provokes, and where it can go. As Loveless (2019) explains, “the uncanny instantiates a (curious) drive that hovers at the intersection of knowing and not knowing, belonging and not” (p. 47). Chance perambulatory field experiences with children and educators were filled with many knowns and unknowns with the potential for a number of directions. Each experience was a subjective, collective invitation. Through deep engagement with field notes, sketches, videos, photos, and educator-researcher dialogue, a bubbling up of ideas took shape. Remaining open and attuned to uncanny data and bringing a willingness to engage with the rogue were important elements of finding data. In other words, the approach was an always-present

question of how “to tell new stories, in new ways, in the academy” (Loveless, 2019, p. 45). I have presented data analysis in two forms because this is how I felt I could best convey this knowledge. A standard academic format of peer-reviewed journal articles for two of the dissertation’s chapters made sense with the data. Chapter 4, *An Uncommon Field Guide*, required something entirely different from Chapters 2 and 3. The guide became an enactment of Loveless’s quote, “and to be told by them” (p. 45). An *Uncommon Field Guide* is, in many ways, the field telling me—after all, the field is the guide. The stories of a dead grasshopper, a storm drain, and a cigarette butt are heard and relayed in the new way of an uncommon field guide.

Aligning methodology to theoretical framework symbiotically is a constant circular process of intellectual interrogation. In other words, through the research and writing, documenting, and creating process I am constantly ensuring how and where the research work fits with theory and methodology. This is a challenging task, as Owen Chapman (as cited in Loveless, 2020) explains: “Research-creation is an un-assimilate-able challenge to the boxing-in of critical thinking represented by linear metrics of research achievement” (p. xxiv). And so the data analysis term is dismissed for its rigidity and disconnection from both the theoretical framework and methodology for this research. Instead, from the field comes alignment with the uncanny and rogue in considering otherwise.

1.8 Summarizing the Research with Propositions

The final chapter of this dissertation is a summary of the research through a lens of place, early childhood education, climate change, and research-creation.

The propositions generated from this research replace the conventions of a conclusion and act as homage to a common worlds theoretical framework. I use Latour’s (2004) propositions as moves away from imperative statements to a “realm of language now shared by humans and nonhumans alike” (p. 83) to consider, not conclude. Propositions shift away from conceptualizing human separateness from nature with statements of science (Latour, 2004). As a postqualitative engagement, this research has been knowingly and purposefully incomplete at each stage. A result of this positionality is a

questioning of the authority of knowledge claims and verifiable truths (Lather, 2006). In the infinite permutations of multilayered, situated research, engagement lies with the possible (O'Sullivan, 2006): The possible is conveyed through propositions from the research.

Chapter 2. Watching Change: Attuning to the Tempo of Decay with Pumpkin, Weather, and Young Children

Hennessy, S. M., & Rooney, T. (2021). Watching change: Attuning to the tempo of decay with pumpkin, weather, and young children. *Children's Geographies*, 1–14.²

Abstract

This paper follows a group of young children in an early childhood education setting and their growing acquaintance with a pumpkin over a five-month period. During this time, relations were forged between the pumpkin, weather and the children, and as we observed these emerging relations, we found ourselves attuning the change of pace this brought to thinking and learning in the centre. In turn, we came to recognise this as the work of a collaboratory. In this paper, we consider the resilience, practices and demands that arise from being in the presence of a pumpkin-weather-child collaboratory.

Weathering interrupts and destabilises routine thinking. Pumpkins weather with wind, snow, sun, critters and rain. Pumpkins also weather whims of human consumption and land management practices as they are reconfigured to meet demands of human traditions. Children draw both educators and researchers into noticing the shifts and tensions unfolding with the tempo of pumpkin decay. Working with a pumpkin-weather-child collaboratory brings opportunities to reconsider the politics and practices of tempo and change in working with children, both in early childhood education settings and beyond.

Key words: Early childhood, place-based, weathering, common worlds, pumpkins, collaboratory

² This chapter differs from the APA style of the rest of the dissertation. It is formatted as it was published.

2.1 Introduction

In early childhood education, children's learning is often embedded within the routines and ordered spaces that educators construct to bring predictability to the flow and pace of daily activity. However, the structured nature of these routines can also obscure the possibilities for learning that arise in what lies unseen or unnoticed in children's relations with non-human bodies, times, places and forces. In one early childhood centre, the arrival of a pumpkin disrupted routines and opened new possibilities for thinking and learning with diverse temporalities through the gradual decay of the pumpkin. This encounter with a pumpkin extended over a period of five months, and in its presence, human centric views of time, place, growth and decay were challenged. This paper explains how we came to understand the emerging relations and interactions between children, pumpkin and weather as a form of collaboratory (a hybrid concept of collaboration and laboratory that we expand on shortly). The collaboratory of pumpkin-weather-child compelled us to look to new possibilities for knowing by attending firstly to the lively acquaintance-making among collaboratory participants, then over time to the children's invitation to sit and 'watch change' with pumpkin, until eventually we all (educators, researchers and children) fell in with the weathering tempo of pumpkin decay as it folded slowly back into the earth. As our ideas unfold in this paper, we consider how watching change and re-orienting ourselves to notice the lively entanglements between this collaboratory and its surrounding microworlds, can act as an invitation to question the fast-paced, human-centric, hyper-visible practices of consumption and production that often drive the routine of human lives. In the presence of pumpkin-weather-child, we became acutely aware of the ever-moving micro times and worlds of soil, critters, seasons, growth, earth and decay in ways that challenged our human tendency to embrace linear and ordered temporalities.

Several themes weave through this paper as we consider the implications and insights from the process of decay and adjust to a new pace of learning. We look to the significance of the gentle folds and folding of pumpkin as revealed through the sensory interchange between child, pumpkin and weather, the possibilities of seeing what is unseen as we sit with pumpkin-weather-child, and the practice of weathering-with pumpkin. Across all of these we notice a growing attunement to the pace of change,

described here as the tempo of decay. Our discussion in this paper focuses on how we came to think and learn with variable rhythms and fluctuations of decaying matter. We highlight the potential in this approach for, somewhat counterintuitively, attuning to the pace of ongoing life and change in a way that challenges human-centred routines and rituals. We observe how the fluctuations in the tempo of decay that we witnessed lie in stark contrast to the rigid and controlled scientific breeding processes involved in the strictly timed production (and subsequent disposal) of Halloween pumpkins; an event that in certain times and places dominates the pumpkin imaginaries of childhood. With pumpkin-weather-child, we ask how attuning to other life tempos might provide an alternative to the overly structured and adult-imposed routines and schedules of childhood, and more broadly, might also invite insight into the care-lessness of human-driven production that too often exploits, rather than fosters, the mutuality in weather-plant-earth-human relations. It is in responding to these concerns that this paper unfolds.

In this inquiry we consider the new possibilities for the future practice in early childhood education based on re-thinking children's relations with time, place and more-than-human others. The empirical field work reported below was undertaken by Sarah Hennessy and occurred from October 2019 to March 2020 in an early childhood centre located in Southwestern Ontario on the traditional lands of the Anishinaabek, Haudenosaunee, Lūnaapéewak and Attawandaron peoples. Later in this paper we describe the methodological approach in more detail and share extracts from the field notes. Before doing so, we first explain how we came to understand the emergence of pumpkin-weather-child as a collaboratory, and then provide an overview of the theoretical influences that inform our discussion.

2.2 Recognising Pumpkin-Weather-Child as a Collaboratory

Our exploration of the unfolding relations between pumpkin, weather and young children is part of an ongoing pedagogical inquiry inspired by scholarship within the Common Worlds Research Collective (2022) that draws attention to the significance of our (human) relations with more-than-human worlds. The research is part of a wider study

being undertaken within the Climate Action Childhood Network³, an international network of researchers who are investigating alternative pedagogies to the dominating discourses of both developmentalism and child-centredness in early childhood education with a view to seeking out new ways that educators might respond to the challenges of climate change.

Over the period of the field work, and in our joint reflection since, we have come to know pumpkin-weather-child as a collaboratory; a term we take from a group of early childhood researchers led by Veronica Pacini-Ketchabaw, who explain:

The [collaboratory] is a hybrid and experimental space where educators and pedagogues trace and experiment with the contours, conditions, and complexities of early childhood education pedagogies in the 21st century.

(<https://www.earlychildhoodcollaboratory.net/about>)

As a space where the work of collaboration and laboratory merge, we interpret this concept as a lively place where things are created and happen with the coming together of people and/or a rich array of more-than-human others, including animals, plants, earth, waterways, atmospheres, micro-critters and much more. The activity in the collaboratory demands that we notice the actions and doings of more than just the children, but rather attune to the activity of all participants as well as the entanglements and interconnections that stretch far beyond its fluid boundaries.

In the field work for this project, Sarah did not set out to create or bring together a collaboratory; but rather the generative potential of the deepening relations between pumpkin, children and weather became so apparent during the field work and in our subsequent analysis, that we could not avoid the insistence that we pay attention to the collaboratory that was unfolding. Initially, we grappled with the place of adults in relation to this collaboratory. And while we recognise that it was an adult that brought the

³ This paper is part of a funded study with Climate Action Childhood Network (<http://www.climateactionchildhood.net/>), an international collaborative partnership created by the Common Worlds Research Collective (<http://witnessingruinsofprogress.climateactionchildhood.net/>). The research is focused on young children, education, and challenges related to climate change.

pumpkin to the classroom, and on occasions would move the pumpkin around or observe the children with the pumpkin, it soon became evident that such actions were at the periphery of what we came to notice as the generative doings of the collaboratory. This does not mean we view adults (or other actors such as trees, buildings, earth or insects) as ‘outside’ the collaboratory, for it doesn’t make sense to articulate the boundaries as fixed in this way; rather, we name the collaboratory as pumpkin-weather-child so as to foreground our interest in attending the encounters and relations between these three participants and the different stories of time, place, liveliness and decay that they drew to our attention. ‘Child’ here encompasses all the children at the centre in their interactions with pumpkin; which sometimes involved an individual child and at other times were more collective. The moments of encounter witnessed between child bodies, movements, voices and times with other collaboratory members became a lens attuned to the collective doings of children in relation to pumpkin and weather. Weather although also named here in the singular, refers to the multiple forms in which we might understand the work or formation of weather as will become apparent throughout the paper.

In noticing what was happening in the pumpkin-weather-child collaboratory, we also came to recognise that we were affected by what we noticed and that we could not ignore the demand to pause and listen to the doings and demands of this collaboratory. We acknowledge that the pumpkin did not seek to be part of the pumpkin-weather-child collaboratory, but nonetheless—once the pumpkin was brought into the education setting—we had an opportunity and responsibility to witness the work, relations, tensions, cares that came with getting to know pumpkin. By following the children’s interest in the pumpkin, our study here in part takes up Pitt’s invitation to explore more fully “what plants do” as active presences in human-world relations (2015, 49). We agree with Vranken (2020, 238) that this is not an equal relationship; as she says of her collaboration with plants “(t)here is no innocence in our co-working” for we are “complicit in their mis/displacement and will have to find ways to deal with the innate oppressive nature of our relationship”. Thus, thinking of pumpkin-weather-child as collaboratory is not to suggest a bounded entity, or a collaboration that happens in isolation. There are many other members—known and unknown, seen and unseen—worms, microbes, air, water, adults to name a few. Here we focus on pumpkin, weather

and child because of the intensity with which these three members work together and change each other. In this way, we are not so much interested in what this collaboratory 'is' but rather in what it 'does'. We also recognise that there are ethical insights and repercussions that the collaboratory demands. In particular, it requires us to question the complex legacies we (humans and settlers) bring to the entanglement, and we draw out some of these throughout this paper.

First, a brief introduction to the three focus members of the collaboratory.

Pumpkin is matter and came to matter to the children in the early childhood setting. The pumpkin was brought into the centre from a nearby farm. It entered as a native species and as one of the oldest domesticated (by humans) plants. This was not an innocent addition to the centre, as the pumpkin entered ripe with political and geographic discourses and tensions of human genetic and climatic interference, and colonization. The pumpkin also challenged routine practices in the centre and introduced some tension for educators as decisions were required as to what to do with the pumpkin, where to store it and what to make of the children's growing relationship with the pumpkin even as it decayed into a smelly rotting form. The pumpkin reminded us that "living is full of encounters that intrigue and provoke us" (St. Pierre, 2013, p. 226) and in this case demanded that we think beyond ourselves to recognise the concerns of pumpkin matter.

Children in the collaboratory brought another dimension; a non-innocent and open curiosity to being-with more-than-human worlds. It was the children's engagement with pumpkin that drew the adults in and made it impossible for the adults to ignore. The children invited us to sit with pumpkin and, if we were to remain with the children in this encounter, we too had to slow or quicken our thinking to move with the tempo of decay. For us as researchers, the children in this collaboratory were not idealized or limited (Istead & Shapiro, 2014; Kraftl, 2015)—their work in the collaboratory was acknowledged as hard, real and full, and provided for us an opening to unseen worlds and possibilities.

Weather in this collaboratory includes the changing elemental conditions of rain, wind, heat and cold that acts as a force of both growth and decay. The act of weathering is also

a reminder of the resilience of pumpkin and lands in the face of careless human practices. Weather interrupts, shifts and destabilizes any sense of routine or regularity and weathering is the process of folding and unfolding both pumpkin and stories into and from the land. Children weathered the silence of a snowfall and the gentle movements of air, weather, during the many times they sat with pumpkin. The work of weather shifted and shaped the processes and times of decay, and the children witnessed ongoing weather changes. To weather is in some sense to decay, but it is also to enliven and prevail.

It was with pumpkin and weather that the movements of this particular group of children were shaped and opened to new possibilities for where, how and why they found themselves; for example, sitting with pumpkin in the snow or foraging in a forest for critters that might one day eat the pumpkin.

2.3 Tempo, Weathering, and Decay

Before turning to a description of our fieldwork and findings from our observations, we discuss here the inter-related notions of tempo, weathering and decay, as core concepts that frame our discussion and the insights derived from this research. This project was in one sense situated in place and time, and yet as we explain further below, the collaboratory also forged connections across cultural and biological histories, physical, agricultural and geological places and complex legacies of colonialism.

Recent writing on diverse temporalities (Farquhar, 2016; Pacini-Ketchabaw and Kummen, 2016; Rooney, 2019; Smailbegovic, 2015; van Dooren et al, 2016) remind us that there is more to time than human time. For example, in their work with children, Pacini-Ketchabaw and Kummen (2016) make time to walk outdoors and sit with a forest in ways that gives the children a chance to notice changes over time, from the micro happenings in the forest that day to imagining deeper times that shaped the geographies of the place. With, Pacini-Ketchabaw & Kummen (2016), we wonder what kinds of more-than-human temporalities might enliven children's life worlds and what might we do in our practice with children to better notice the rhythms and times of entangled human and non-human lives.

Rather than talk of time or temporalities, we shift our attention here to the notion of tempo. This is because we want to find ways to attune to the pace of decay that we notice and grapple with when we sit with pumpkin-weather-child. Tempo suggests movement and change over time and, as we illustrate below, in relation to the doings of the collaboratory there is nothing in the pace of change that is recognisable as linear, regular or predictable. Rather, there is a wafting, unfolding, mushing, and often gentleness to the pace that draws us along with the decay of pumpkin into deeper life worlds and times. Louise Farnsworth (2003, 118) explains that tempo “represents a flow of energy in time, and in relation to the environment”. We choose to think with tempo for two reasons. Firstly, we find tempo a way of attuning to the pace of decay of organic matter, the rhythmic circulations of weathering and the slowing down that makes way for the children’s curiosity about change itself. Secondly, with tempo we focus on energy and relations rather than human constructs of time and routine. Pumpkin time, decay time, child time, weather time move with diverse and fluid tempos. Tempo, an element of experiencing time, is active, moving and experienced by all things (Farnsworth, 2003; Gren, 2001; Yusoff, 2018). In decentring the human, we look for tempos that might be shared by all members of the collaboratory. As Farnsworth explains, pace connects to biological rhythms. These paces, like nocturnal/diurnal and circadian rhythms are vital to health. All members of the pumpkin-weather-child collaboratory move along with variable tempos blurring rhythms of the entangled human and non-human lifeworlds (Pacini-Ketchabaw & Kummen, 2016).

The tempo of weather is in constant flux. New weather intensities, as well as prolonged periods of hot, dry or wet seasons, come with rhythms and cycles that are less predictable and are becoming further exaggerated as a result of human-induced climate change. In an article that explores the relationship between weather and time, Rooney (2019) suggests that attuning to the work and affects of weather can provide insights into the diversity of more-than-human times and scales that humans often ignore. Furthermore, when working with children, if we provide opportunities for learning with the shifts and fluctuations of the weather world (Ingold, 2007), and the way that weather is intimately entwined with all other worldly actors and activities, then we also open a way for children to experience diverse temporalities that circulate through these more-than-human worlds. Rooney

(2019) also highlights human entanglement with weather, and in particular the way that humans are now clearly implicated in the increase in extreme weather associated with climate change, as a reason to bring human-weather relations to the fore in research work with children. The everyday encounters with weather and weathering, can provide a point of connection to larger scale times and concerns that might be otherwise difficult to comprehend (Rooney, 2019).

As researchers, we recognise that we interfere with the ongoing work of the pumpkin-weather-child collaboratory. Our roles are something the members have to tolerate, put up with and to weather. In recognizing ourselves as problematic in this context, a new story unfolds—a story that makes weather more complex than what the elements of rain and snow do in decay. This moment of reckoning is an example of Farnsworth's (2003) tempo-derived energy. Human behaviours are changing the planet through climate change, impacting growing seasons, temperatures and water levels. They have also had an impact on the realities of species diversity through genetic modifications. Pumpkins, genetically modified by humans, now exist with orchestrated limits of colour, shape, insect resistance and growing time, fundamentally shifting and narrowing the pace of species development from the species half a millennia ago. This is to say that the pumpkin we are acquainted with is already a re-storied version of pre-contact pumpkins. While some approaches to farming of pumpkins may focus on the interconnectedness and reliance of weather, earth, seasons, nutrients and food, other practices are more explicitly human-centred, both in practice and purpose. In the production of Halloween pumpkins, the entwined tempos of growth, seasonality and weather are ignored in favour of a mode of production that is controlled, genetically modified, economically driven and directed towards maximum output for a single day on the (human) calendar. This mass cultural consumption of pumpkins becomes divorced from the notion of plants as sustenance and life-sustaining, and the resultant mass waste has little regard for the fruitful folding of pumpkin back into the earth, with millions ending up in landfill the day after Halloween (Poon, 2019). As Myra Hird (2013) observes, sending waste to landfill does not mean that it is contained, for it will eventually decay and disperse into earth, air and water ways. However, such homogenous mass disposal does impose a human-driven timeline to the tempo of pumpkin decay and return to earth.

Introducing a pumpkin to a group of children—an encounter we expected to last a day or two, but that extended across months—provided an opening to rethink unexpected and tensioned challenges such as these, highlighting how any discussion of time, decay, growth and life is at the same time a discussion of weathering and elemental forces, but in a way that cannot be disentangled from the impact of human activity.

In drawing attention to the tempo of decay in this paper, our suggestion is not that this tempo replace the linearity of human calendars and clocks, as dictators of curriculum. These human mechanisms of time come with their own tempo (e.g. familiar regularity of a tick, tock rhythm, or of day turning to night) that can provide comfort, routine and security. Rather, through our work with pumpkin-weather-child we, our aim is to make visible the limits of human understanding of time, as solely linear, and offer a framework that shows the value in recognizing and taking the time to attune to other tempos that more richly capture the cadences of non-human and human matter weathering together (Smailbegović, 2015).

Decomposition, part of the nutrient cycle essential for recycling finite matter in the planet's biosphere, engages with an ebb and flow that weaves relations and changes with weather, earth, air and the diversity of living species. Members of the pumpkin-weather-child collaboratory participate in a range of processes associated with decay, moving in and out of this entanglement attuning to the pace of decay as much as to relations with others. Pumpkin and children do not just engage with weather; but, as we highlight in our discussion, in many respects become weather, (Ingold, 2015: Rooney, 2019) weathering the ongoingness of life, matter, weather and decay.

2.4 Ways of Learning: Fieldwork and Findings

The extended encounter with pumpkin described in this paper is part of a broader more-than-human ethnography being undertaken by Sarah Hennessy. The field work was undertaken between October 2019–March 2020 in an early childhood centre located in Southwestern Ontario on the traditional lands of the Anishinaabek. The class was of twenty-four children (each of whom participated to varying degrees), four educators and Sarah.

Stories of pumpkin, land, weather and human connectedness have been told and retold over time. To situate this research, we start with a story and practice of many First Nations (including the Iroquois, Haudenosaunee, Mohawk, Akwesasne and Seneca), the Three Sisters.

Three Sisters is the story of companion planting where corn, beans and squash (or pumpkins) are planted close together so they can support and benefit each other. The corn provides structure for the bean plants to climb while beans provide nitrogen for the corn and squash. The big leaves of the squash plant prevent weeds and retain moisture in the soil. Together this provides all the complex carbohydrates, fatty acids and all nine essential amino acids for a human diet. (Corneau, 2016; Mann, 1997).

Inspired by this Haudenosaunee story the entanglement of corn, beans and squash with human farmer working with the land, we came to realise that the collaboratory of pumpkin, weather and child in the early childhood setting was only one of many such collaboratories that are re-storied, nurtured, decomposed, recomposed and folded in with the earthy and atmospheric matter of ongoing deep times and places. The story cycles of Haudenosaunee epochs, with folds that continue, reincarnated with past and future folds are always connected (Mann, 1997). We recognize, value and are thankful for the generative knowledge of First Nations in understanding this story. It has reminded us that the pumpkin-weather-child collaboratory requires positioning within another factor—the tensioned histories of the land.

The collaboratory emerged on the traditional lands of the Anishinaabek, Haudenosaunee, Lūnaapéewak and Attawandaron peoples, lands connected with the London Township and Sombra Treaties of 1796 and the Dish with One Spoon Covenant Wampum. While this land continues to be home to diverse First Nations peoples it is undergoing extraordinary change as it hastily transforms from farmland into developed suburban housing. The childcare centre where this research was undertaken is a product of resulting population growth from this transformation. New suburban developments perpetuate the wrongs of settler-colonialism and presence ongoing tensions of relations in this place. The pumpkin in this collaboratory came from a nearby farm. As farmland is

rezoned for human housing, and local forests are sculpted to perform as stands of nature for humans, the politics of complex histories remain visible. In this political geographic space, these tensions cannot be ignored alongside the seemingly ordinary presence of a pumpkin in an early childhood classroom.

During October, the pumpkin spent some time first in the open classroom. It was then moved by a teacher to a dark cupboard as it had begun to smell. Sometime in late November, it was (re)discovered by an educator and brought out for the children to inspect and pull apart. Eventually the pumpkin shell was taken outside to the playground where it remained for some months continuing its slow pace of decay. There is much more detail to the movement of pumpkin than can be described here. We hesitate even to include this description of events with this degree of linearity as already this ignores some of the messy and entangled tempos of decay that we noticed and try to capture below; for example, some of the rotting pumpkin moved around the room on the children's hands and ended up down the sink, some seeds were kept and others scattered in the forest, and the pumpkin remains were at times moved, turned or neglected for varying periods. When the pumpkin eventually disappeared into the earth, we were left to wonder whether it had really gone and whether there was any sense in which pumpkin-weather-child collaboratory continued. The unfolding relations between the children, pumpkin and the processes of weathering, offered an unexpected invitation to think differently about human / non-human relations and challenged the pace and rhythm of the daily teaching and learning routine. In this, we were reminded of Bennett's (2010) observation when she considers Dewey and writes "members of a public are inducted into [it] rather than volunteering for it: each body finds itself thrown together with other harmed and squirming bodies" (p. 101).

While we cannot know the tempo of decay as pumpkin or weather might 'know', we speculate that this might involve an irregular mix of gentle unfolding, breaking down and folding in, alternating with more dramatic and sudden shifts and (re)compositions, eventually perhaps slowing into a deep slow time of underworld geologies that come with wider patterns and eruptions of change, dislodgement and relocation of matter (Yusoff,

2018). Moving and thinking with a tempo of decay was part of our learning with this collaboratory.

2.5 Stories of the Pumpkin-Weather-Child Collaboratory

In this section we tell stories extracted from Hennessy's field notes. We follow each with a short reflection in which we aim to capture something of the curious process of decay and to draw out some of what seems distinctive about the rhythms and workings of the pumpkin-weather-child collaboratory.

Becoming acquainted

The consumption of lunch paused as all eyes fall on the pumpkin. Carefully placing the bright pumpkin on the floor, the visitor tells us the story of picking the pumpkin in the field and transporting it back in the wagon with another group of children. Conversation ensues with discussions of the colour orange, Halloween, fields, farms, roasting pumpkin seeds and the smell of pumpkin soup. As children leave the lunch table greetings and acquaintance-making with pumpkin begin. Both arms of a child encompass the fat pumpkin that has joined the room. Hands slid down its skin catching the rolling edges of the folded contours of pumpkin. Bodies collide with pumpkin and pumpkin rolls across the floor. Collectively, we watch it roll and pause. Another child leans in and tentatively licks the soft orange skin bestowing a succulent kiss on pumpkin. Extending relations, a third child leans in again and gently rubs their cheek along the contours greeting pumpkin and building acquaintance with this new kin. (S. Hennessy, personal communication, October 27, 2019)

Halloween was still to come. But this pumpkin would not be carved or become a jack-o-lantern. This pumpkin became a member of the room; the beginning of a deeper relation was forged. What we would learn with pumpkin remained unclear at this point. We noticed that touch, care and haptic communication were part of relation building. As a form of non-language communication which conveys meaning through physical contact, haptic communication emerged early as a method of communication for members of the collaboratory. Touch can inform others of our presence. How touch happens also conveys intentions (Bobby, 2014). In watching children become acquainted with pumpkin, we

wondered what intentions or relations might be conveyed through gentle rubs, succulent kisses and the following of contours. Knowing seemed to emerge through the movement of colliding and moving bodies. Upon acquaintance, the children in this collaboratory moved and were moved by pumpkin, rolling pumpkin to and fro. Pumpkin folds and uneven floor made for unexpected movements with pumpkin. When the pumpkin rocked, at this stage with folds still intact and firm to the touch, the irregular pace of pumpkin made it hard to predict where it would go next, yet the children followed. Becoming acquainted was a jolty, unexpected and yet gentle unfolding. We started to notice hints at the non-linear engagements that unfolded over time. Pumpkin engagements, with the Three Sisters and a tempo of decay, transformed into connections across cultural and biological histories, including with First peoples and complex legacies of colonialism. The predictable and linear logics of life, death, decay were thus disrupted by the diverse temporalities that lie deep in human engagement with more-than-human worlds. Similarly, realities of mess and smell raised awareness of change that is not necessarily seen or orderly, but disruptive to routine learning. The collaboratory of pumpkin-weather-child provoked intimate dialogue on how time and place is understood and enacted.

Messy markings

We find wrinkles, folds, freckle-like spots, and bruises. The pumpkin has wounds, scratches, sores, appendages. It has lived and carries the markings of a life. Its weathered surface indicates encounters and signs of life over time. Through its skin we learn it has weathered many events, including humans who have grown, cut and sold it. (S. Hennessy, personal communication, October 28, 2019)

When the pumpkin began to rot in the classroom it was put away. The educators were concerned that the smell from the increasingly softened skin might cause mess and convey dirty conditions to parents. There was a morality (Biss, 2014) infusing itself into the classroom through fear of parental judgement of mess and decay. We follow Eula Biss (2014) and Alexis Shotwell (2016) in thinking with a “human continuity with everything here on earth” (Biss, 2014, p. 76) and how this continuity is a “starting point for critical inquiry, rather than an explanatory end” (Shotwell, 2016, p.10). Our

entanglement with pumpkin was not innocent. Keeping the pumpkin in the class, as acquaintance and more, was an act of unforgetting as resistance (Shotwell, 2020). There was defiance and critical inquiry with the act of keeping pumpkin, knowing it would become messy, smelly and filthy and possibly offend the order of classroom ideals (Douglas, 1985). In early childhood education, childhood's framings of innocence, vulnerability, and purity are changed to involve complex active agency and the political (Moss, 2017).

For millions across North America pumpkins are produced solely for human entertainment on a single day, Halloween. When this day has passed pumpkins are resigned to the garbage or compost bin as waste. More significant than the messy marks on the pumpkins, these piles of waste act as marks of our own (human) mess. The decomposing bacterial, fungal blooms of pumpkin death disturb us and remind us of decay and the imperfect realities of life like the noxious smell we can't escape. This pumpkin stayed. Weathering the changing smells, sounds, shape and colour, we stayed with the pumpkin and its trouble (Haraway, 2016).

Pumpkin atmospheres

As pumpkin folds in on itself, a smell emanates from the rotting flesh and noses begin to scrunch up. Touch and sight transfers to smell as our relations and behaviours attend to this noxious odor. The stench wafts out to meet our noses and interrupts play, changing our material dynamic with pumpkin. This response to the overripe is enough for some children to turn and leave. But for some this is an invitation to smell more. They lean in and stick tongues out, in snake like fashion, to interact with the airborne aroma of pumpkin. Many watch each other and pumpkin attending to the 'now what' thinking of this experience. There remain peripheral children unwilling to touch or step onto the paper with pumpkin having set a personal boundary of engagement. They did not escape the smell. (S. Hennessy, personal communication, November 3, 2019)

Sitting with pumpkin-weather-child as the pumpkin slowly decays, the collaboratory demanded we notice the entanglement of weather, bodies and atmospheres. The airborne aroma reminded us that pumpkins are not bounded or solid materials. Where child-

pumpkin-weather met was not always material in a physical sense; it was at times atmospheric and eventually liquid. In decomposition, the pumpkin not only changed the surrounding air with its gaseous emissions, but, once it was moved to the playground, it changed the composition of the soil below, shifting levels of moisture, absorption and aeration in the soil; weathering with earth and microbial habitats.

The smell of the decaying pumpkin was unavoidable. As the children sat close breathing in the air thick with pumpkin smell, we noticed that the rain and other elements were not simply external weather actors in the decay process, but that pumpkin had become weather (airborne) and child had become (breathed in) pumpkin (Pollitt et al, 2021).

The smell of decay reminded us that we cannot escape membership (Latour, 1993). Reluctant or engaged we were all involved, complicit and non-innocent. These transformations were part of the changes we could not see happening. We sense worlds we cannot see (Greenhough, 2016). The encounter with noxious, nose-scrunching odour, between weather, pumpkin and children, was a moment that commanded our attention. Naming and describing this moment was a pedagogical decision—it was not innocent. How we, as adults and educators labelled the smells of rot was as much an act of education as the putting away of the decaying pumpkin. How we practice with decay is not therefore innocent (Wilson, 2017) and in these moments we realised that the children were showing us how to stay with the discomfort of decay, rather than hiding it from view. Together, the collaboratory was inviting us to consider how we might learn with the tempo of decay without consigning it to a cupboard. It became possible to recognise the gradually intensifying smell of the tempo of decay as a practice that warranted atmospheric space in the classroom, even if it disrupted the usual routine.

Watching change

The pumpkin carcass remains outside on the playground for fourteen days slowly transforming with weather, microbes and animals. After more than a week under a blanket of early snow it is once again visible, I join the children on the playground and notice three children standing around the fence surrounding the gas line. I approach asking, “what’s up?” they silently point towards the pumpkin carcass contained on the

ground behind the metal fence. I kneel down and join them pressing my face against the cold metal bars. A first child whispers “we are watching change”. There are nods of silent assent. Unwilling to break the silence I stare and begin to notice the white film on the surface and the faded nature of the former vibrant orange. As we stare in silence the children begin to speak “I can’t reach it”, “it doesn’t smell anymore” and “now it is food”. I ask “who’s food?”

The answers come fast and furious, “birds”, “owls”, “squirrels”, “raccoons”, “bugs” and “monsters”. A child in the sandbox some distance away yells “worms, too. We just can’t see the worms. Lift it up, under the pumpkin.” (S. Hennessy, personal communication, November 17, 2019)

The invitation to consider ideas of speculative enchantment with monsters changes the tempo. In considering monsters, the collaboratory narrative is “shaken by the extraordinary that lives amid the familiar and the everyday” (Bennett, 2001, p. 4). Imagination opens new possibilities of liveliness and reveals other members we cannot see but must consider. Bennett (2001) reminds us of the unintelligibility of many sensory experiences that generate speculative and creative energies. With the collaboratory, speculation is part of a new fold in the undulating tempo of decay. The visible and invisible creatures are, at once, familiar and unfamiliar and disrupt any question of boundaries in the pumpkin-weather-child collaboratory. While this paper focuses deeply on three members and their work, we can see from the above field note that worms, owls and others are active in the collaboratory. The children consider what else is part of the decay and engage with features that adult humans may find revolting.

In watching change, the children seem puzzled that we (adults) do not notice what they are doing with weather and pumpkin. We can’t see change in the regular paced moments of educator time, beholden to a schedule. It can be difficult to notice the tempo of plant activity “because the changes are too gradual or minute to perceive” (Pitt, 2015, p52). This applies just as much to decay as growth. In this scenario, Hennessy may well not have noticed the change in the pumpkin if it were not for the children. Through this, we realise that children were showing us how to watch change that was so slow it could not

really be seen at all. Smailbegović (2015) also reminds us that “such an attunement to the particulate differences that compose change is difficult because many of them occur at rhythms of transformation that are below the threshold of temporal sensitivity available to human perception” (p.96). Or perhaps we should say human adult perception, given that the children seemed to readily attune to the slow pace of change, they witnessed over months of getting to know and being with pumpkin. Allowing children to sit with more-than-human others, Affrica Taylor (2011) suggests, can “reintegrate the child back into the imperfect, real and messy world of fascinating ‘socio-natures’ that we all embody and coinhabit” (p. 431). In this collaboratory, the children enter into these messy more-than-human worlds with pumpkin and weather.

As we watch children who tell us they are ‘watching change’, we find ourselves considering: How might we give attention so that we (adults) can see the decay, and perhaps slow down and attune to unfamiliar tempos? We understand this as an invitation that the pumpkin-weather-child collaboratory has asked us to consider.

2.6 Breaking It Down: Final Discussion

The praxis of decomposition connects a variety of willing and unwilling members in a lively collaboratory of plant members, human members, microbial members, weather members, political and theoretical members. In the pumpkin-weather-child collaboratory, the tempo of decay is the pace at which members fold and unfold into each other and others. We define the tempo of decay as engaging and moving with the dynamic, unpredictable, and unseen of the ambient factors and relations of decomposition. The pace of decay slackens with a snowstorm, slowing microbial action and hiding the pumpkin from human eyes. Similarly, the noxious odor of rotting pumpkin becomes with air and wind to infiltrate human noses and bodies. The smell wafting in the wind conveys a pace of change that is difficult to measure but that persists nonetheless.

With a tempo of decay, we contemplate Maxine Greene’s (1988) guidance to consider alternatives in childhood that unfold time beyond the human. One deep inhale can energize thinking connecting noses with decay and other realities, possibilities and place. With decay, the teacher/parent/adult time that dominates children’s experiences is

backgrounded and its linearity folds in and out of the collaboratory that is shifting the tempo of daily routines.

Decomposition is a dynamic process that follows predictable stages but is unpredictable. When the pumpkin arrived in the classroom its relations with decay and humans were already underway. Decomposition was revealed and progressed through each abrasion. For the pumpkin, death occurs when the fruit's stem severs from the plant. Once separated from the plant it begins to break down based on three major factors of the physical environment (soil, temperature, water), quantity and quality of dead material available for decomposers (a whole field of pumpkins will decay faster than a lone isolated pumpkin), and the nature of microbial community (Chapin et al., 2011). For the pumpkin in this collaboratory the elements of Fall and Winter in southwestern Ontario and the corresponding drop in temperature, rainfall and ensuing snowfall, location in close proximity to various scavengers (raccoons, birds, squirrels, foxes, skunks, and rodents) and physical location on a combination of soil and woodchips, all acted and interacted as ambient and unpredictable factors in the pace of decay. On arrival at the centre, the pumpkin resembled its living field self—firm, intact and orange. With time and interior temperatures, it softened, unfolding the intact whole-ness of the pumpkin and communicating its active decay with smell, softness and discolouration.

The tempo of decay, as a fluid process dependent on various members, was one of many tempos that gave pace to the work of the collaboratory. The children participated, in part, according to monochronic linear time—determined by the clock and calendar, and the diurnal rhythms of our species. Weather tempos, entangled with human, bring a cyclical nature where winter occurs both before and after fall/autumn. Weather presences the unseen; a blanket of snow visually concealing the pumpkin from other members. Children are eventually drawn into the tempo of decay; enough to know that sitting in stillness with pumpkin and weather is to be 'watching change' at a tempo that resists routine and regularity.

In concluding this discussion, we share two insights that we take from the collaboratory for our wider understanding of times, places and concerns: first, acknowledging that the

entangled membership is in part what makes it possible to act with new, collective tempos that invite us to rethink scientific practice; and second, that in being transported into times and places beyond the human we can see how we might become human differently in our everyday practices and actions.

To expand on the first point, the pumpkin-weather-child collaboratory reveals new ways of acting and enacting a collective tempo. Collaborating, is far from simple. Members infiltrate, become with and travel together, becoming blended. In thinking with Shotwell (2016) here, we use the term ‘blended’ to avoid the purity connotations associated with the more scientific term ‘hybrid’. These blendings blur boundaries between members. The collaboratory demands that we, as humans, recognize unlikely alliances. We are a blend as individuals and as a species with each human body being composed with as many microbial cells as human ones (Hey, 2019). And while there is a system of decay at work, the doings are more than those of science-based understandings of decomposition. The members, seen and unseen are ‘in dialogue with’ (Plumwood, 2009) each other through tempo and haptic communications. Decay is not at work with weather and children because of scientific knowledge—decay predates this knowledge. Decay also predates human time and attuning to the tempo of decay reminds us that more-than-human histories and futures will always exceed our own. It becomes possible to see the unseen. Wind, invisible to human eyesight, together with rain, snow, temperature from land and sun, moves and infuses with others to moderate tempos that affect the microbial community. Collaborators are a fluid, heterogeneous group changing in shape and state in often inaudible and invisible ways (Cortade, 2018; Hey, 2019). Dismantling the laboratory in collaboratory acts to decentre researchers, scientists, humans and shift understandings of scientific collaboration to a more inclusive model of the more-than-human, vegetal, unseen, and weather.

The second insight we take from our work with the collaboratory is that it disrupts human-as-norm, inviting us to consider “ourselves-as-humans in different ways” (Castro, 2019, p. 12). Humans participate, but as non-hierarchical members, often at the edges. Like the acknowledgement of Woods et al. (2018) of a forest as co-author, for us pumpkin, place, microbes and weather author the work of the pumpkin-weather-child

collaboratory. With an emphasis on tempo, the collaboratory moved away from constraints of a linear past-present-future, as different times folded into and became the rhythms of change. This highlights how nature is not an amorphous backdrop to the human (Chakrabarty, 2009), but rather a rich entanglement of distinct members with tempos that extend to and include the human. With one comment of ‘watching change’, the children, as witnesses to change they were part of, showed us a different way of being human (Castro, 2019), as member-not-boss, as non-innocent but unforgetting (Shotwell, 2016). We could sense the children trying to convey a process rather than a thing; a slow, imperceptible process that they somehow sensed we (adults) could not see.

In working with the tempo of decay members of this collaboratory have enacted what Shotwell (2016) refers to as a “thick conception of entanglement” (p. 100). The snow covering the pumpkin behaves similarly to the leaves of pumpkins in the story of the three sisters, keeping weeds at bay and moisture in the soil. With weather, the children inhale the thickness of entanglement. Over time, all members of the collaboratory changed: children’s engagements moved elsewhere; pumpkin became more soil than pumpkin in its decay; weather moved from Autumn to Winter and into Spring.

2.7 Conclusion

The collaboratory provided a space and co-habitation framework for humans and more-than-humans as interrelated beings together in the world (Sauvé, 2005). This approach repositioned children from the centre of curriculum to a more-than-human system that included the human. As inseparable from the more-than-human world of other materials, species and energies, this collaboratory unfolded as a non-hierarchical entanglement. Pumpkin was understood as more than single-use human entertainment and, as a plant, was not interpreted or measured as in a laboratory, or reduced to routine learning prop in the classroom. Instead pumpkin fed political and pedagogical growth. As a species that grows on all continents except Antarctica and is featured in the culture, cuisine and medicine of a multitude of peoples dating back to 7,500 BC (on a human, Before Common Era calendar), pumpkin brought histories and far flung geographies to this place.

The children's learning time with pumpkin did not rely on a pre-planned series of interactions or stages, but emerged with the relations between children and pumpkin (or indeed parts of pumpkin) and weather; times marked more by disorder than order, and disruption rather than routine. The collaboratory gave rise to tensions with educators through mess, uncomfortable smells and a disdain for purity. The collaboratory threw plans for learning into disarray. Instead problems were raised and educators had to prepare for what was unexpected and unknown. Weathering, folding, unfolding, living, dying and becoming collaboratory together, opened new worlds for the children's learning. As educators and researchers, we realized that the alternating quickening and slowing tempos and trajectories that often elude us as adults, may well provide new opportunities we so often miss.

The process of decay and decomposition has taken us to some lively, life-giving and unexpected places. We return to the First Nations' story of the three sisters and consider how thinking with the tempo of plants, earth, and weather through decay and regeneration can inform how we think about children's emerging relations with the world. At some point the pumpkin will weather and decay into the soil; yet the need to delineate the point at which this change occurs seems less important in light of the ongoing stories of pumpkin, weather and child that continue to unfold. As the folds of the pumpkin collapse inward, we are reminded of folds in the earth; upheavals and histories visible on the surface. The folds in the children's small fingers touch the rough skin of the pumpkin, surfacing first the sweetness and then the staleness of the pumpkin flesh. The folding of weather and bodies moves together in tempos that differ across vast scales, and yet all with presences in the here and now. In bringing pumpkin to children, and children to pumpkin, weathered microworlds unfolded and gave us a small view into the work and demands of a pumpkin-weather-child collaboratory and a pace of decay that in turn revealed much about the ongoingness of life.

Chapter 3. Anecdotal Edges: Propositions From Sketching the Walk as a Posthumanist Research Method

Hennessy, S. (in press). Anecdotal edges: Propositions from sketching the walk as a posthumanist research method. In A. Lasczik, D. Rousell, & A. Cutter-Mackenzie-Knowles (Eds.), *Walking as critical inquiry*. Springer.

Abstract

Reconciling the multidisciplinary nature of being a researcher and artist is a place of tension. In moving away from the binary limits of qualitative or quantitative research, this paper tracks the generative nature of walking and sketching as posthuman research methods. Over the course of numerous forest and community walks in conjunction with the Climate Action Childhood Network research in early childhood education, the limits of language-based data collection were backgrounded in favour of a postqualitative, posthumanist zone of contemplation and questions (Lacy, 1995). In being drawn to draw the forest floor, strewn with pig-nosed nut shells, thistles, and bunny tracks, the process of sketching simultaneously became the doing of research (Grosz, 2001). During these common-worlds-informed walks with children, learning was something done *with* and *within* natures as opposed to something external we learned about (Latour, 2004). As a slow, enmeshed, delicate process, this slow learning *with* required patience, sensorial listening, and defiance. Walking and the resulting sketches are political acts motivated by an unwillingness to be blindly, wholly complicit in the material, consumptive behaviours of anthropocentric culture and education. In framing these sketched walks, multitudinous enmeshed worlds at once precarious, dead, vibrant, struggling, thriving, political, and trampled became, first, anecdotal edges and later, propositions (Latour, 2004) in the creation of an uncommon field guide.

Key words: sketching, walking, posthumanist methods, uncommon field guide, early childhood education, common worlds

3.1 Introduction

The pairing of sketching with walking is part of a larger research narrative where early childhood education, art, and research intersect in pursuit of understanding alternative educational directions in addressing climate change and precarious planetary health. This chapter is part of the creation of an uncommon field guide using a research-creation methodology (alternatively referenced as artistic research, arts-based research, or arts-driven research, among others). Sketching, for me, is a part of an onto-epistemological way of learning and being that has always included creative rendering. In addition, the expression of knowledge and learning through and with artistic practices and mediums has always informed my professional practice as an early childhood educator. The personal intersection extends to include a stance on the interconnected natures of humans as a species that are part of the world, not separate from or superior to other species. Animals, plants, energies, histories, and temporalities have always been a part of my conscious existence informing my move towards a common worlds understanding of interconnectedness/mess (Common Worlds Research Collective, 2022), and so the natural choice for my research was a feminist new materialist informed common worlds theoretical framing.

Focusing practice on thinking *with* nature in early childhood education considers new ways to be with the planet in light of climate change. What could thinking differently in early childhood education look like when we decentre humans in the more-than-human worlds we participate in every day? It is with this question that a posthumanist method of researching and creating an uncommon field guide entangle walking with sketching as ways of knowing.

This research falls under a broader field of education for sustainability (Ärlemalm-Hagsér & Sandberg, 2011; Inoue et al., 2016) which brings a posthumanist lens to the growing and complex field of environmental education. Inoue, O’Gorman, and Davis (2016) address the need for a “broader view of sustainability [that] should prompt educators to create pedagogical environments and plan learning activities that enhance children’s awareness of ecosystems, environmental issues, and relationships between humans and nature” (p. 177). This education for sustainability within common worlds “reposition[s]

childhood and learning within inextricably entangled life-worlds, and seek[s] to learn from what is already going on in these worlds” (Taylor, 2017). In entangling alternative pedagogies in early childhood, humans’ becomes one of many nonhierarchical understandings, existences, histories, and tensions instead of the anthropocentric default in culture and education.

An uncommon field guide, as an alternative to traditions of common field guides, is conceptualized as an opportunity to think differently with young children and educators about how we understand the complexities of place. Field guides, illustrated identification manuals, are a way of learning about a place, species, or ecosystem. Field guides share a number of characteristics that include an illustrative nature, often favouring hand-drawn, painted, or sketched renderings accompanied by systematic, scientifically based classification of biological traditions of taxonomy (Schaffer & Young, 2015). Physically compact, field guides are purposefully designed to be carried into the field for active identification use. They are often organized by ordered categorization to identify and distinguish genus, species, and subspecies in a geographically defined area (Law & Lynch, 1988). An additional element of a field guide is the conceptual design for a specific end-user, the amateur, as they are positioned for use in the real world within nature, not as comprehensive compendiums for laboratory reference. Visual rendering of the natural world in field guide traditions has included the works of Aristotle and Virgil through to European-led colonization practices driving the works of Lewis and Clark, John James Audubon, and Charles Darwin (Philippon, 2004). Much of the early field guides were scientifically based, government-led initiatives of cataloguing and inventorying human dominion over the natural world (Scheese, 1996). Field guides also have a long history tied to pastoral approaches to nature that work to further separate humans from natures (Scheese, 1996). These tendencies to position a pastoral, pristine wilderness act to romanticize nature as singular and other, perpetuating and supporting human beliefs of superiority and separation from the natural world.

In introducing the term uncommon field guide, I trouble the concept of nature as separate in an effort to reclaim this tool for a planetary, twenty-first-century era facing climate change. An uncommon field guide favours a more approachable, dialogic way of

dismantling one vestige of colonialism by attending to the slow, close, and relational ways of being in more-than-human worlds, reconsidering colonial histories of inventorying place for human need, and reframing them as more-than-human, storied, and political.

3.2 Research with Place

This research is part of ongoing pedagogical inquiry inspired by the scholarship within the Common Worlds Research Collective (2022). The field work for this research occurred from September 2018 to March 2020 in an early childhood centre located in southwestern Ontario on the traditional lands of the Anishinaabek, Haudenosaunee, Lūnaapéewak, and Attawandaron peoples. The research forms part of ongoing work in the Climate Action Childhood Network⁴, an international collaboratory of shared ethnographic research focused on alternative pedagogies to the dominating discourses of both developmentalism, a psychology-led approach to development through set ages and stages, and child-centredness in early childhood education. In centring thinking with place, humans and human children are not centred. In place relations, the limits of the appropriate age to discuss certain concepts are diminished in favour of the provocations from everyday existence within a more-than-human world.

As part of weekly site visits to the early childhood centre, groups of educators, children, and researchers walked local neighbourhoods, forests, and pond areas surrounding the centre. The place of these walks and this centre carry tensioned histories. The centre exists on the traditional lands of the Anishinaabek, Haudenosaunee, Lūnaapéewak, and Attawandaron peoples, lands connected with the London Township and Sombra Treaties of 1796 and the Dish with One Spoon Covenant Wampum. This land, home to diverse First Nations peoples, is changing rapidly from farmland to developed suburban housing. The childcare centre of study for this research is a product of resulting population growth from this transformation. This place is many places at once—traditional lands, farmland, subdivision, and changing habitat for many. A result of this split personality of place is

⁴ This paper is part of a federally funded study with Climate Action Childhood Network (<http://www.climateactionchildhood.net/>), an international collaborative partnership created by the Common Worlds Research Collective (<http://witnessingruinsofprogress.climateactionchildhood.net/>). The research is focused on young children, education, and challenges related to climate change.

that tensioned and troubled observations of place are foregrounded on walks as we collectively witness complicated, political, and troubling change. It is this tensioned change that prompted the conceptualizing of an uncommon field guide—a guide beyond traditions of field guides to alternatively render the complicated realities of worlds the child care centre community is part of.

Sketching and walking are the two primary, interlaced methods of data collection in creating an uncommon field guide as a way of framing a more inclusive participant communication platform with the more-than-human worlds (Puig de la Bellacasa, 2009). In keeping with posthumanism's repositioning of the humans a species in more-than-human worlds, posthumanist methods position humans in situated and relational entanglements (Taylor & Pacini-Ketchabaw, 2015).

Drawing on sketches and walks with young children (aged 8 months to 4 years) this chapter considers the interwoven natures of walking and rendering as posthumanist methods, conceptualized through anecdotal edges. I begin by conceptualizing my understanding of sketching and walking as process. Using examples, the chapter continues with consideration of the anecdotal edges of sketching the walk as research process and their relations with Latour's (1999, 2004) propositions.

3.3 Anecdotal Edges

Anecdotal edges are where visual meaning, technique, response-ability (Haraway, 2016), and a dialogic existence with others happens. Anecdotal edges are a process and a pedagogical approach to sketching and walking as methods, acting as possible spaces—posthumanist, unfixed openings to aesthetic data (Bennett, 2010). Anecdotal edges are a personal term for the confluence through sketching that entangles the indecision and discomfort of options—options that infiltrate, pollute, and enliven thinking with sketches. The concept of anecdotal edges began by chance through a decision to paint on wood because of the way the grain participates in the work. From painting (as seen in Figures

3.1 and 3.2⁵), the possibilities found in edges act as openings to multiple possible directions. Questions and tensions hang on these edges and provoke thinking.

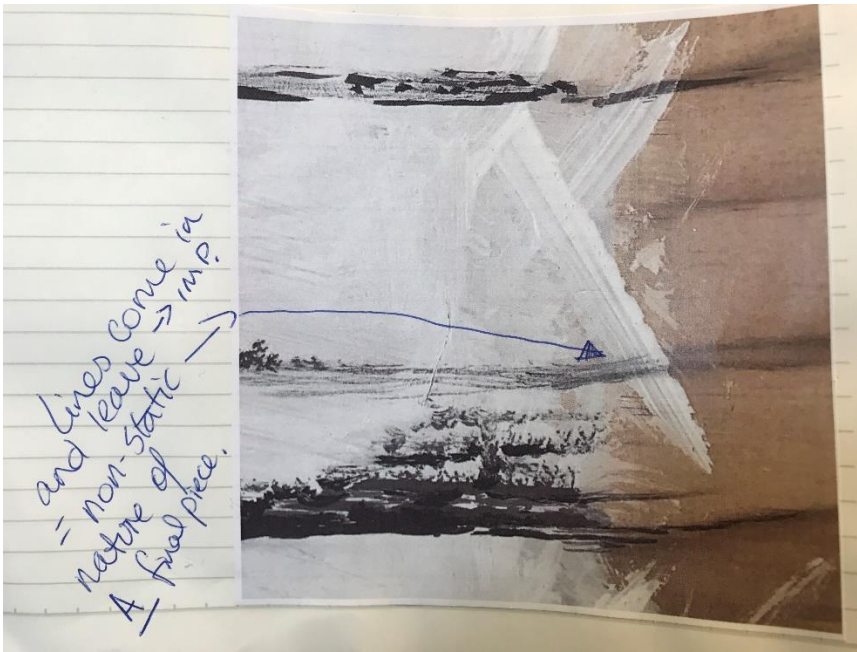


Figure 3.1. Anecdotal Edges 1. Author's field book photo.

⁵ Note: All figures are originals and remain the property of the author.

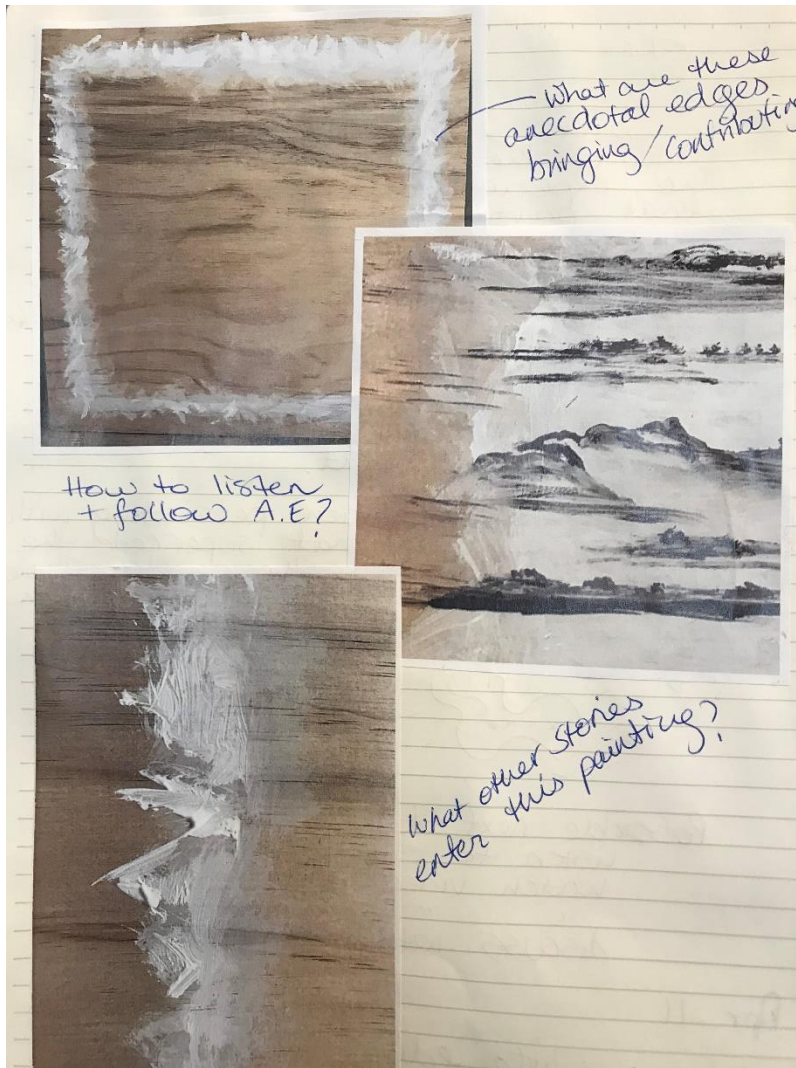


Figure 3.2. Anecdotal Edges 2. Author's field book photo.

The term *anecdotal edges* is found in Canadian author Alice Munro's (1983) introduction to "The Moons of Jupiter," a fictional short story that weaves mourning, memory, and family in a nonlinear format. In the introduction Munro explains that while her writings may connect to personal stories she positions short stories such as "The Moons of Jupiter" as art "carried away from the real"; she continues by explaining how observation-derived stories "lose their anecdotal edges" and are "invaded by familiar shapes and voices" (p. xv). While Munro explicitly frames the fictional nature of her writing and its distinctly unreal nature, I use anecdotal edges to actively engage with real, tensioned, and present politics, stories, and histories.

Taking a posthumanist approach to multiple realities, I frame my voice as one of many stories, all of which may carry art, fact, and/or feeling. Furthermore, I trouble what Munro references as the “familiar shapes and voices” as these, for me, are often colonial legacies, violences, and oppressive voices. I choose not to subconsciously default to the familiarity of colonial voices, instead foregrounding other stories and voices often not afforded familiarity in recognizing that stories that normalize narratives have consequences (Pacini-Ketchabaw & Heydon, 2019).

I remain intrigued by the fact that my place-based research is coincidentally located in the same county in southwestern Ontario where Munro was raised and where she returned to live before writing “The Moons of Jupiter” (Munro, 1983). I wonder if there is not some serendipity of place that brings two alternate approaches (dare I say stories) together on a distinct term of anecdotal edges?

Anecdotal edges and sketching

Sketching is complicated terminology embroiled with a multitude of definitions, theories, and approaches. For the purposes of this chapter and the bridging of walking with sketching as posthumanist methods, the following section is an effort to coalesce ideas on sketching. As part of a process of envisioning an alternative understanding of humans as part of, not distinct from, an othered “nature,” the dialogic nature of anecdotal edges in sketching an uncommon field guide brings other stories—more-than-human, more-than-colonial, more-than-dominant stories—into the sketches. This visual thinking is enmeshed with ethical response-ability (Haraway, 2016) and political considerations. I cannot unsee the knowledge of histories, presents, and futures that exist within my gaze. For me this is a choice, an unwillingness to be mindless in rendering a current moment of what is visible with my privilege. What I see often carries ethical troubles and histories. The act of defining shapes and the defaulting to contour can damage understandings of our limited visual abilities (Greenhough, 2016; Smailbegović, 2015) and a common worlds approach (Common Worlds Research Collective, 2022) that works to blur boundaries not enforce them. Rendering the form of black walnuts (see Ghost, Acorn?, Figure 3.4), buckthorn berries (see Buckthorn, Figure 3.3) or thistles (see (in)vulnerable?, Figure 3.6) is not simplified lines but a barrage of questions about native species

“introduced” by settlers (Jackson et al., 2020), the unseen among us, and toxic neighbours and the implications for this place. Sketches like “Buckthorn” and “Sonic Pebbles” (as seen in Anecdotal Edges 1 and Anecdotal Edges 2, Figures 3.1 and 3.2) carry as much political and ethical consideration as they do lines, marks, and representation. The political and ethical enter the sketch through the indecision, openness, and potential of anecdotal edges. The sketches carry conversations, relationships, histories, and discomfort. The process of sketching prompts reflection with others, more-than-human and human. The plethora of complexities only distantly connect to constraints of drawing instruction to represent what “is”: Sketching with anecdotal edges is only tenuously connected to what “is.” Sketches such as “Buckthorn” and “Ghost, Acorn?” resemble actual plants and moments of forest floor decay and life. The edges of those sketch lines carry dangling questions that perturb.

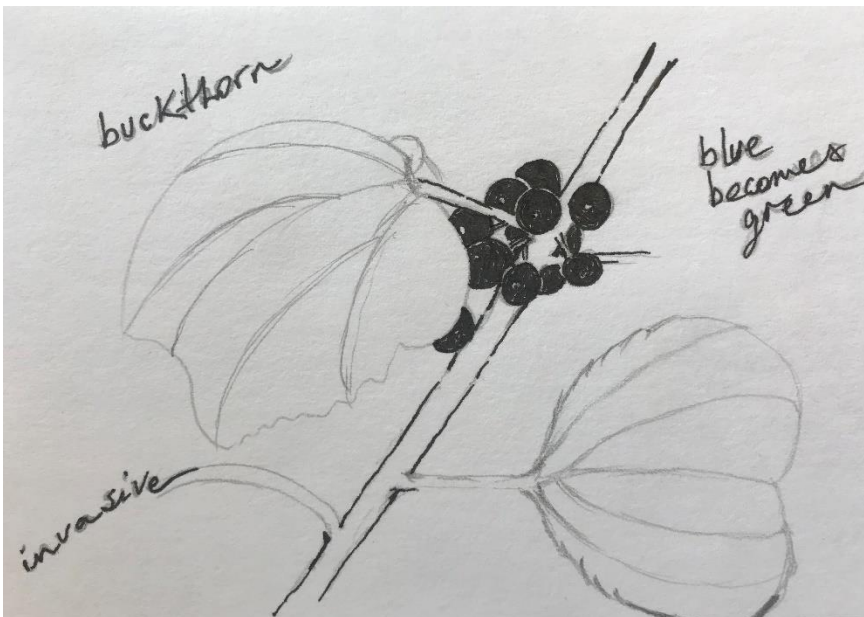


Figure 3.3. Buckthorn, 2020.

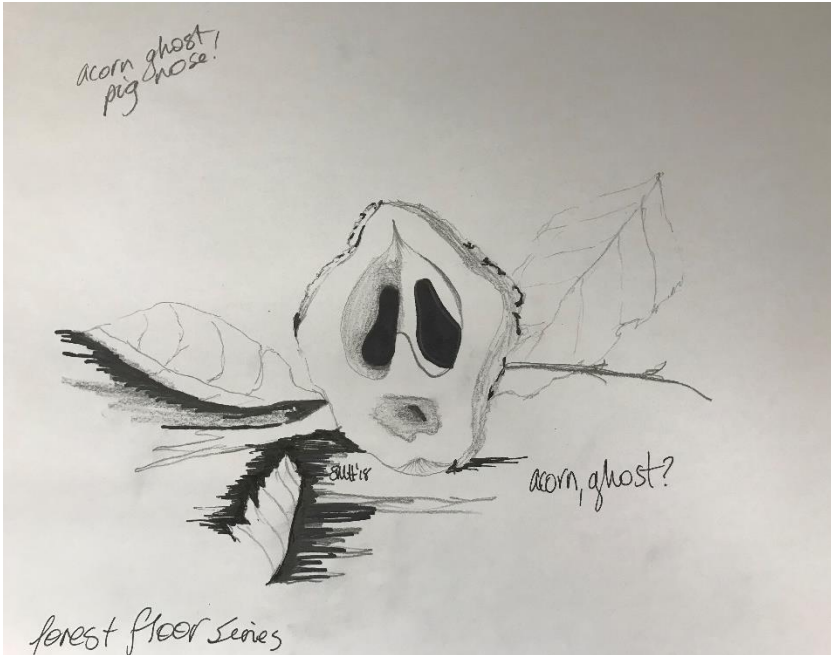


Figure 3.4. Ghost, Acorn?, 2018.

The sketch, for some, is an act of abandon and freedom (Causey, 2017). For me it is a collage where thought, memory, and place vibrate together with politics and histories. These sketches, with anecdotal edges, move past limits of *a* reality, seen and mediated by an artist. In thinking and rendering with anecdotal edges, reality is closer to an understanding of Latour's (2004) pluriverse, where the work towards a common world is composed of propositions instead of divisive subjects and objects. I sketch within the tension of undetermined propositions as an alternative to an approach of abandon and getting lost used by other artists in sketching (Causey, 2017). In an alternative to categorizations that distance humans from nature, I actively hold tensions in my pencil/pen. As many drawing instructors, such as Nicolaides (1969), suggest, we should concentrate on what is before us when we draw. I choose not to put away, sideline, or dismiss the ethical, political, and historical realities of what I sketch, or my privilege in being in this place and doing this work. In particular, I sketch with complex realities of being a settler on First Nations land and the outrage of persistent, systemic colonial realities. I sketch with realities of a changing planet from waste, pollution, and human-generated climate change. I sketch with a Western system of early childhood education that remains focused on a world of individuals, school preparedness, and productivity

(Ritchie, 2016). I do not put these away to sketch, instead choosing to see these complex politics as they enter through anecdotal edges and participate in the sketch. I confront the systemically perpetuated stories that exist but may not be visible before me but are nonetheless present. Like in the sketch of European buckthorn, an invasive species introduced by English and French settlers in the 1800s, they are a berry, a bush, and a consequence of certain behaviours.

Anecdotal edges with walking

Walking, as method, brings complexity to place through a collective embodiment. It is both a way to arrive at a place to sketch and the dialogic path of anecdotal edges.

Walking is one step in front of the other connecting and separating from place with each footfall. For McClintock (1994), the walking that happens in a place is a “common action become uncommon” (p. 95) evoking spiritual, sensorial, and aesthetic thinkings beyond the simplicity of one foot in front of the other. To consider walking we often also consider the places where we walk. Place is a rich, complex understanding beyond a tradition of geographic location: It is embedded with geology, time, and histories and framed as educator and narrator (Iorio et al., 2017; Smith et al., 2019; Styres, 2011). Walking, as generative practice, “brings attention to the landscape . . . [providing for] patterns, paces and paths of walking as experienced in the breath, rhythm, sweat and memory of the walker” (Myers, 2010, p. 59), and as a result of being in the presence of others connects to more collective thinking (Stengers, 2005). The embodied walking dialogue with others, human children and educators, with histories, with tensioned questions actively carries anecdotal edges. With “Buckthorn” (Figure 3.3) dialogue of invasive species, colonization, and consequences opens to a deluge of problems, questions, and possible answers about the complex meanings of invasive. The problems, questions, and possible answers are walked as much as they are talked. These walked discussions are interwoven further with interrupting binaries of good and bad species, shaking bushes to create “berry rain,” questions of bird food and the staining consequence of squeezing berries. The result is that these anecdotal edges occur in a melded blur of walking, stories, histories, and sketching into a pedagogy of ecosophical awareness (MacCormack & Gardiner, 2018). The openness to experimenting with berry stains and the indeterminate natures of walking with questions of what invasive means

positions walking as an open, attuned, and respectful method (Ingold, 2015; Instone, 2015). The dialogue emanating from encounters with the invasive species of European buckthorn is an example of Instone’s (2015) respectful wayfinding as invitations to “take less-worn and unknown paths and to forge new connections” (p. 181).

When walking with children, especially children mastering walking, much visual attention is ground focused. Often in the forest and field the walking is a slow, dialogic revelation of stuckness—we trip and we see. In waiting for others, we notice tracks and ask questions. We problematize our steps: “in finding bunny tracks, we question the implications of following” (Hennessy et al., 2020).



Figure 3.5. Bunny Tracks, 2018.

Walking uncovers sparks for engagement within entangled worlds of the ecosystem. In looking slowly, through walking, the practice transforms to a way of being with open “inventories” focusing on the “rich, often category-defying jumble of features” (Tishman, 2018) found on sketched walks. This way of looking, seeing, being, and thinking *with* sketched walks is reinforced in opposition to the encyclopedic tendency towards categorizations of many common field guides.

When those dialogic pauses happen to consider our human path in a more-than-human world, we think with a critical ecology of place (Instone, 2015) on that walk at that moment. The “let’s follow them” thinking upon finding bunny tracks is problematized as we consider the bunnies’ fear. Walking becomes as much about where to walk and where not to walk and the consequences of decisions as care and opening ourselves to the indeterminacy of potential in this moment, on this walk and in this place. Nairn and Kraftl (2016) suggest, “Places gain meaning—through human action, through dwelling, through emotional attachments, through events, and through memories attached to them” (p. 5). With bunny tracks and buckthorn, human behaviours and resulting consequences position curricular and pedagogical response-abilities (Blaise et al., 2017; Haraway, 2016) that can develop from place making. The bunny tracks and buckthorn also position relationality and human implications in the history and future of this shared place.

3.4 Wayfaring

As posthuman methods, both sketching and walking share a commonality of place-attuned wayfaring. Both sketching and walking are understood as embodied acts of attunement to a slowed attentiveness that works carefully to understand rhizomatically, deeply, and ethically (Pacini-Ketchabaw et al, 2016).⁶ Tim Ingold (2011) brings sketching and walking together when he writes,

The practice of drawing has little or nothing to do with the projection of images and everything to do with wayfaring—with breaking a path through a terrain and leaving a trace, at once in the imagination and on the ground, in a manner very similar to what happens as one walks along in a world of earth and sky. (p. 178)

In sketching, as practice, a common worlds approach to pedagogy and more-than-human relations intersects with the role of place in understanding and existence. These traces, of ethics, politics, consequences, are embodied in the walk and rendered on paper as anecdotal edges that create unlikely and messy partnerships (Haraway, 2004). For human

⁶ Other works on attunement include Nelson et al., Nxumalo, 2018; Taylor, 2013; Tsing, 2015; van Dooren et al., 2016.

wayfarers, both understandings of place and pedagogical practices work to reorient educators toward alternative thinking about children's relations with place.

3.5 Common Worlds

A common worlds framework is encapsulated by Taylor's (2018) explanation of childhood "as made and lived through entangled sets of noninnocent human and more-than-human relations indebted to the maxim of situated knowledges" (p. 207). It firmly decentres the human child and flattens participation in worlds with a more-than-human understanding, working alternatively to the child-centred focus of early childhood education. Common worlds practices carry political tones that influence understandings of care and ethics in early childhood. Common worlds, a term from Bruno Latour's (2004) book *Politics of Nature*, is explicit in merging thinkings between nature and politics. While early childhood is absent from the book, Latour positions a collectivist approach for common worlds and practitioners, suggesting we "replace the singular with the plural everywhere. Suddenly we have natures" (p. 29). By bringing this thinking into a common worlds practice, care extends beyond the child or the human (Dahlberg & Moss, 2005; Nelson et al., 2018; Puig de la Bellacasa, 2017). In extending care to the more-than-human in practice, educators engage with political behaviour beyond the neoliberal, developmentalist discourse of institutional curriculum and policy. Material, consumer behaviours that frame humans as employees, workers, and buyers contribute to the dominant developmentalist focus on skills and competencies. This is to say the thinking in practice can extend to land and Indigenous considerations and the tracks we leave as educators when we model care for and with children (Pacini-Ketchabaw & Taylor, 2015; Smith et al., 2019; Tuck et al., 2016). An additional area of political nudging in educator thinking is the move away from mastery over nature towards a collective, nonhierarchical thinking *with* (Nelson et al., 2018; Plumwood, 1993): It is a political move away from stewardship, human ego, and superiority approaches in light of climate change (Taylor, 2017). To think with, we notice and experience differently.

Anna Tsing (2015) practices a specific kind of noticing that informs both my position as researcher and a postqualitative lens shift with nature. In Tsing's model of noticing, I position myself within both the research and worlds as a subjective, noninnocent

participant. The arts of noticing, in creating an uncommon field guide, counter field guide traditions of rational, verifiable positivism. It is through walking together with place and being drawn to draw the forest floor, strewn with pig-nosed nut shells, tracks, and thistles with toxic neighbours, that the processes of sketching and walking simultaneously become the doing of research (Grosz, 2001).

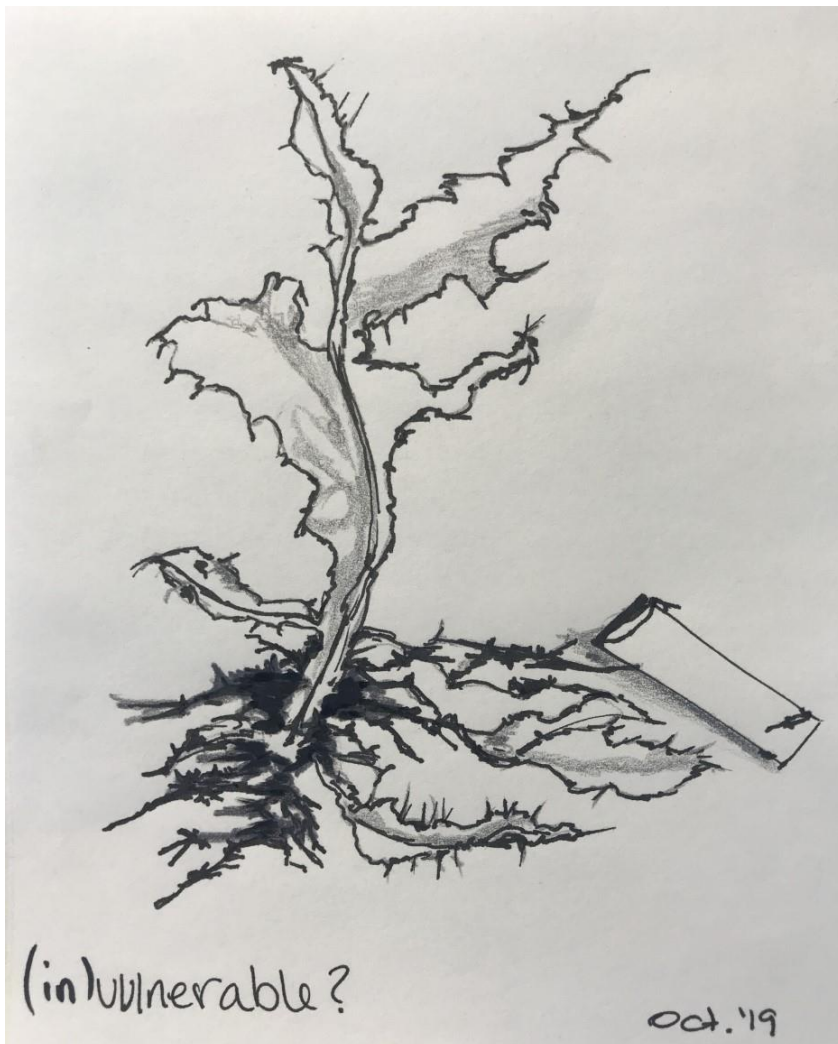


Figure 3.6. (in)vulnerable?, 2019.

A part of honest dialogue in common worlds methods is a focus on the value of the anecdote—a short, narrative story designed to engage listeners to ponder a topic in a relational way. This anecdotal concept allows thinkings and moments to be tangible and accessible, connecting storytelling and restorying to close observing and methods of practice (Nelson et al., 2018). Storytelling, a staple in cultures and education systems,

provides a platform for the lived experience of a common worlds approach. These anecdotes and moments are a method to counter the tide of an abstract, global, foreign, and daunting side of climate change (Kraftl & Khan, 2019; Taylor & Pacini-Ketchabaw, 2018).

3.6 Relational Everyday Practices

A posthumanist ethics of relationality is one that allows for all that is human, nonhuman, organic, inorganic, alive, dead, or yet to materialize, as well as the virtual and the real, to be a part of the practice that is creative knowledge making within the context of environmental education (Blyth & Meiring, 2018, p. 107). Common worlds methods, rooted in the ordinary, everyday walks, conversations, observations, and sketches, resituate lives within more-than-human common worlds (Hodgins et al., 2019; Taylor & Pacini-Ketchabaw, 2018).

As open-ended, indeterminate, and exploratory, walks, sketches, ensuing conversations and restorying (see *Buckthorn Regenerated*, Figure 3.7) become collective educator/child/researcher memories with more-than-human common worlds, where stories are regenerated differently as a form of ethical revisionist practice. In troubling tracks and berries, the everyday becomes spaces to adjust Munro's (1983) familiar voices and instead trouble stories and consider alternative behaviours.

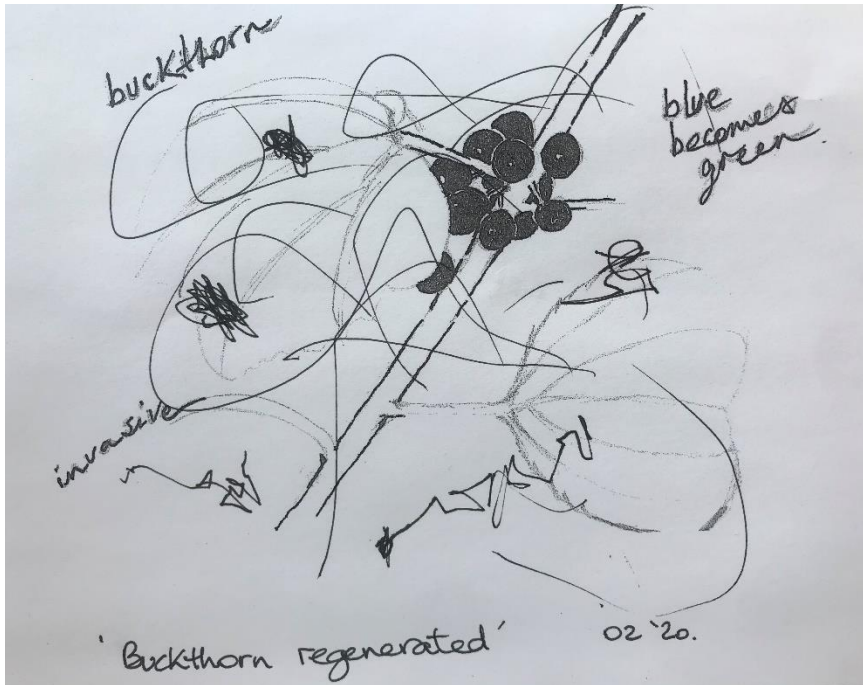


Figure 3.7. Buckthorn Regenerated, 2020.

After photocopying the buckthorn sketch, children were invited to regenerate the sketch as we revisited our stories and memories. In layering regenerated stories, walks, memories, and conversations, these marks become a practice and product of a pedagogy of ecosophical awareness (MacCormack & Gardiner, 2018). As Leanne Betasamosake Simpson (2017) explains, the building of wisdom, which comes from the ground up in Nishnaabeg epistemology, is continually regenerated through the relationality of the personal and community. How then are these new layers of stories and new marks on sketches acting to interrupt familiar voices of colonialism with invasive species?

Process thinking

Anecdotal Edges 1 and 2 (Figures 3.1 and 3.2), from my personal art journal, are used to consider how creating artistically invokes stories, politics, and more-than-human wonderings. In sketching out a painting titled “Sonic Pebbles,” I wrote the following thoughts on the process as anecdotal edges:

Start the painting with an ethos of blurred edges—use thick, water-thinned brushstrokes with some transparency.

Edges/non-edges are superseding the painting's original concept—tension.

Now which way to go next?

Bring the white edges of paint in from the edges of the wood pane to keep the story fluid and avoid the static nature of a final piece.

What other stories enter this painting? What are the anecdotal edges contributing? How do I listen and follow them?

These questions and prompts activated thinking about the complexities of sketching and what the process brings to research, practice, and creation. What is the importance of the transparency of paint? Is this a connection to the grain of the wood, an attempt at honesty of my individual place in the work, frustration with the lack of transparency in society, or more? Why do I return to the word tension as an invitation to think differently? The indeterminacy of where to go next is a vital part of the process, a sketch, walk, or dialogue: It is exciting and laden with consequence with each choice. The fluidity and avoidance of a finished finality resonates as the work of the pluriverse (Latour, 2004) and posthuman positionality. As a story that can be restoried, will the piece be finished? Use of the term follow suggests a lack of control or power in this engagement. These complexities extend to considerations of the problems of boundaries, creeping language, and Latour's (1999, 2004) thinking with propositions.

Creeping language

The tension with words like invasive in “Buckthorn” and questions in “Ghost, Acorn?” highlights the creeping nature of language and writing to infiltrate the sketch, as a habit of my enculturation to English, writing, reading, and Western, settler ways. Similar to the field notes on “Sonic Pebbles” (as seen in Anecdotal Edges 1 and Anecdotal Edges 2) is the engagement of invasive as a question directly attached to the stem in “Buckthorn.” The writing changes the sketches and dismantles the sketch, acting to breathe the conversations onto the paper and the realities of a field book as collage of living, doing, and creating. A field book is at once a sketchbook, a journal, an observation repository,

and a jumbled collage of happenstance with leaves, dirt, dead bugs, and children's drool participating in the mix.

The words carry different weights in sketches. With “(in)vulnerable?”, what began as a note to question educators about became both the title of the sketch and a critical incident of pedagogical practice (MacNaughton, 2009). The tiny thistle plant that broke through layers of asphalt opened to discussions of early childhood education as an underpaid, neglected profession and months of discussions about disrupting power, as adults, in early childhood practice. The thistle was rethought as (in)vulnerable and later conceptualized with toxic neighbours like asphalt and cigarette butts (Hennessy et al., 2020). Words on sketches provoke questions. Are the children's markings in “Buckthorn Regenerated” unspoken speculations we are unable to decipher? With “Ghost, Acorn?” edges of the sketch become the words and questions. How does a hollowed black walnut shell become a pig's nose, squirrel food, toxic cause of nut allergies, and scary? How do these observations and anecdotes of the walk and sketch carry dialogue on the question of ghosts and the unseen among us? The anecdotes that continue to perambulate with pedagogy and curriculum making happen both in the sketches and the words and marks that mix with the sketch storying the uncommon field guide. A sketch becomes a walked story of anecdotes, questions, and tensions within these entwined worlds.

3.7 Latour's Propositions

I question whether what is happening in the anecdotal edges of sketches and paintings is akin to Latour's (1999) propositions. Propositions, with Latour's (2004) common worlds, extend beyond a generic understanding of suggestions. Propositions are a “realm of language now shared by humans and nonhumans alike” (p. 83) carrying uncertainty unlimited by language. Propositions shift away from conceptualizing human separateness from nature with statements of science (Latour, 2004). Are the questions and provocations at the edges in fact “other, not ideas, or things, but nonhuman entities, or . . . propositions” (p. 288)? Are these propositions, that participate from the edges, in fact a form of dialogue with nonhuman entities? Is the participation of the wood grain in “Sonic Pebbles” a collective dialogue in a single livable world without division of nature and culture? If this is the case, I am left to consider how to reframe the anecdotal edges

beyond the limits of ideas: They are not ideas but cocreators. This dilemma directly challenges my presumptive habit to sign a work as solo creator.

For political ecology, there are not one world and multiple languages, just as there are not one nature and multiple cultures: there are propositions that insist on being part of the same collective. (Latour, 2004, p. 84)

What happens when wood grain, pencil line, written words, connections of feet with ground, grass, air, and more stop being multiple languages and instead open to propositions? Are the edges of a sketched walk propositions in this shared realm? Is considering the tensions in anecdotal edges a habit in a collective common world practice? Habits, as understood by Latour (2004), are similar to human interests, are open to revision in the collective proceedings. When we move beyond divisions of objects or people to shared propositions in a world with member requirements, we become sensitive to resistance from others in the shared realm. Could the invasive of “Buckthorn,” considerations of the unseen in “Ghost, Acorn?” and toxic neighbours of “(in)vulnerable?” be member resistance? As practice, how do I form the habit of attuning to the grain of anecdotal edges?

3.8 Conclusion

The importance of anecdotal edges in sketching is part of an effort to think alternatively to the firm, bounded material comfort to which humans are enculturated. As Jane Bennett (2010) explains, “humans need to interpret the world reductively as a series of fixed objects” (p. 58), but with anecdotal edges, these fixed natures of understanding at a human level get blurred. Spirits, microbial, untouchable, unseeable (by humans) worlds and histories exist and can be sidelined by what Bennett refers to as human bias for fixed.

In conceiving of an uncommon field guide for precarious climate times, the habits and propositions suggest that a different kind of field guide is required for a different kind of progress. In engaging with the habits of anecdotal edges, is it an orientation to, and even a way of practising, what Haraway (2016) calls response-ability? How can sensitivity and attunement to resistance from others be found in walking and sketching? As generative methods, walking and sketching open to alternative stories. These alternatives inform the

creation of an uncommon field guide and considerations of place-based practice in early childhood education. While the anecdotal edges found in this chapter inform thinking with propositions, not binaries of human or more-than-human, how do we build habits?

Chapter 4. An Uncommon Field Guide

4.1 Introduction

An uncommon field guide, as an alternative to the genre of common field guides, is conceptualized as an opportunity to think differently with young children and educators about how we understand place. An uncommon field guide problematizes the origins and traditions of field guides, framing alternative possibilities within its format.

Field guides are illustrated identification manuals and a way of learning about a place, species, or ecosystem. Field guides share a number of characteristics that include an illustrative nature, often favouring hand-drawn painted, or sketched renderings accompanied by systematic, scientific classification of biological traditions of taxonomy (Shaffer & Young, 2015). Physically compact, field guides are designed to be carried into the field for active identification use. They are often organized by ordered categories to identify and distinguish genus, species, and subspecies in a geographically defined area (Law & Lynch, 1988). An additional element of a field guide is the conceptual design for a specific end user, the amateur, as they are positioned for use in the real world, in nature, not as comprehensive compendiums for laboratory reference.

Field guides share a tradition of pocket-sized, subject-specific efforts to scientifically catalogue nature as part of knowing-nature traditions dating back to 30,000 B.C.E. with cave drawings of animals. Field guides traditionally position nature as other and separate from humans. Traditionally, field guides “sit at the crossroads of literary subjectivity and methodological objectivity, re-marking an intersection of the humanities and the sciences” (Carson, 2007, p. 11). Visual rendering of the natural world in field guide traditions has included the works of Aristotle and Virgil through to European-led colonization practices driving the works of Lewis and Clark, John James Audubon, and Charles Darwin (Philippon, 2004). Many of the early field guides were scientifically based, government-led initiatives of cataloguing and inventorying human dominion over the natural world (Scheese, 1996). Field guides also have a long history tied to pastoral approaches to nature that work to further separate humans from nature (Scheese, 1996).

These tendencies to position a pastoral, pristine wilderness act to romanticize nature as singular and other, perpetuating and supporting beliefs of human superiority and separation from the natural world.

I introduce the term *uncommon field guide* to trouble the concept of nature as separate from culture. With a research-creation methodology the practice of creating a field guide is reclaimed and envisioned anew for a planet in climate upheaval. In reclaiming the field guide, I worked with educators and children to disrupt concepts of nature as other, as resource and commodity, instead becoming with place as shared kinscape. The becoming of the uncommon field guide is a becoming, of sorts, with Blyth and Meiring's (2018) question, "But what of the child who does not experience 'Others' as 'kin' (Haraway 2015) but rather experiences them as resources to be disposed of how and when 'we' desire and decide (Haraway 1991)?" I engaged with field guides as a way of expanding relations within the natural world we are part of and troubling the binaries that separate humans from nature. I worked with educators and young children to experimentally engage in creating a multimedia field guide with one early childhood centre and its complex surrounding area of urban sprawl, forest, pond, farmland, and varied histories. An uncommon field guide favours a more approachable, dialogic way of dismantling one vestige of colonialism by attending to the slow, close, and relational ways of being in more-than-human worlds, reconsidering colonial histories of inventorying place for human purposes, reframing the field guide as more-than-human, storied, and political. An uncommon field guide becomes a conceptual space for flattening human educators, children, and researchers as members of these more-than-human worlds (Latour, 1993).

An uncommon field guide disrupts scientific knowledge, as the only knowledge, in favour of experience with species, energies, histories, materials, and art. In combining many elements, a field guide positions art and writing together without a hierarchy that favours the written word: Word and image are equally important. A field guide, by definition, requires both written and aesthetic, visual knowledge. An uncommon field guide builds on this pairing while remaining open to other knowledges: audio, digital, performance, and more. In conceptualizing an uncommon field guide understandings of

place are positioned as real, messy, and entangled, complexifying the interrelations of an area shared by many.

4.2 An Uncommon Field Guide

An Uncommon Field Guide is included as Appendix G.

Chapter 5. Inklings: Becoming a Palette of Place Exhibit Catalogue

5.1 Preface

The exhibit *Inklings: Becoming With a Palette of Place* is invitational in nature. The works are an offering of, and storying with, place. I build a layered research relationship with colour, plant, place, and people. The exhibition includes original works generated over time through relations with complicated more-than-human worlds.

Inklings contributes to the Climate Action Network (CAN) project, an international collaboratory researching climate change pedagogies with young children. I use a methodology of research-creation that combines creative expression and experimentation with academic research practices to further knowledge. The art included in this exhibition is from both my research with children and educators at an early learning centre in southwestern Ontario (between September 2018 and February 2020) and personal process works undertaken offsite. Each of the pieces informs an area of my research. For this exhibition, all but one of the works are from my personal synthesizing process, with the exception of “Buckthorn Regenerated.”

This exhibition is situated within a common worlds approach (Common Worlds Research Collective, 2022) that understands humans as part of, not separate from, nature. I consider how a common-worlds-informed approach in early education supports young children to think *with* the planet and other species beyond humancentric ways. Place is messy and entangled and shared by many. A new possible place is becoming with works such as “Inklings,” “Kinscape 1,” “Kinscape 2,” “Possible Flora” and “Possible Flora 2.”

The place of study is a growing community, a product of population growth on the transforming traditional lands of the Anishinaabek, Haudenosaunee, Lūnaapéewak, and Chonnonton peoples. I am thankful to know and research with this place and the peoples who have been its custodians for millennia. This land, home to diverse First Nations peoples, is changing rapidly from farmland to developed suburban housing, making this

place many places at once: traditional lands, farmland, subdivision, and changing habitats for many.

Perhaps most visible in the works presented in this exhibit are the natural, foraged, and created inks from the place of study. I refer to these inks as a palette of place, because the phrase denotes the intimacy of generating small batches of colour as a way to materially engage with place. The foraged palette is locally sourced as part of acquaintance building with buckthorn, sumac, wild grapes, found copper, black walnut, pokeberry, and goldenrod.

If there is a product of place relations, this palette is a representation of our relationship. I think of this palette as an ongoing process instead of a definitive product. Similarly, this is *a* palette of place, not *the* palette of place.

This exhibition is a companion to my Uncommon Field Guide. “Inklings,” “Buckthorn,” “Buckthorn Regenerated,” “Uncommon Buckthorn,” and “Shadow Place (for Val)” are featured in the guide, alternatively rendering the complicated realities of worlds we are part of.

Each work is accompanied by a provocation. As written siblings to the works, these provocations are my responses to the work, shared in an effort to engage viewers in the ongoing thinking with place (Klein & Loveless, 2020). The provocations are invitations to be perplexed, think otherwise, and trouble the work. Putting art and provocation together is an effort to foster consideration, not a conclusion.

5.2 Inklings Exhibit Catalogue

The catalogue is included as Appendix H.

Chapter 6: Conclusion

6.1 Implications of Research: Thoughts From Meeting Up

Through a hybrid of academic, visual, and art chapters, the arrangement of research-creation (Loveless, 2019), and common worlds (Taylor, 2013), this thesis combines a variety of collaborations and methods with a variety of place-specific kin. These common-worlds kin include children and early childhood educator participants and their interrelations in more-than-human worlds.

The words of Doreen Massey (2003) encapsulate my ethico-onto-epistemological position in and with this research:

Space has its times. To open up space to this kind of imagination means thinking about time and space together. You can't hold places and things still. What you *can* do is meet up with them, catch up with where another's history has got to "now", and acknowledge that "now" is itself constituted by that meeting up. "Here", in that sense, is not a place on a map. It is that intersection of trajectories, the meeting-up of stories; an encounter. Every "here" is a here-and-now. (p. 102, original emphasis)

Time, imaginings, place, weather, and stories, as keywords from the above quote, equally qualify as keywords for this thesis. To coalesce the generative natures of my research I return first to my research questions. These are followed by three propositions (Latour, 2004) from the research. I conclude, for now, with learnings from the research and its contributions to early childhood, climate, and environmental education.

6.2 Research Questions

The research questions collectively entwine methodology and theoretical framework within early childhood education. The concluding provocations engage with all three of the following research questions.

1. How might young children refigure place relations within their common world?

2. How might a research-creation methodology contribute to responding to precarious ecological times?
3. How might collaborations within a more-than-human world inform early childhood education?

Because this research is a postqualitative work (St. Pierre, 2018), I do not attempt to directly answer the research questions. Instead, with this thesis, I think with active and ongoing responses to interrelations. I outline my responses in the form of propositions. Through these propositions, I recognize and consider implications from the meeting up (Massey, 2003) within common worlds.

6.3 Thinking with Propositions

Bruno Latour (2004) shifts away from conceptualizing propositions as a generic understanding of suggestions. For him, propositions confront human separateness from nature with statements of science; he suggests propositions as a “realm of language now shared by humans and nonhumans alike” (p. 83), carrying uncertainty.

The concept of propositions aligns with both art as a way of knowing through research-creation (Loveless, 2019) and a common worlds (Taylor, 2013) theoretical framework. In this research, the intra-actions (Barad, 2007) with materials, weather, histories, and species become modes of communications within common worlds and through the creation of art as ink, photo, video, sketch, handprint, stain, and painting. As Latour (2004) explains, “for political ecology, there are not one world and multiple languages, just as there are not one nature and multiple cultures: there are propositions that insist on being part of the same collective” (p. 84). Each of the following are propositions towards collaborations with and within Latour’s collective, more-than-human realm. As a response to the insistence, each proposition highlights elements from the research project that capture the language of situated, relational common worlding (Pacini-Ketchabaw et al., 2016; Taylor, 2018). To engage through propositions allows me to hold to both the theoretical and methodological roots of this research. For me, thinking with propositions is an active, creative way of disrupting the bounded nature of conclusions.

Proposition 1: Disrupting boundaries

Engaging with both common worlds (Common Worlds Research Collective, 2022) and research-creation (Loveless, 2019) acts to disrupt many boundaries in early childhood education and Western cultural discourses. Together, anecdotal edges, the deromanticization of vignette traditions in vigNots, and the speculative nature of inklings, kinscapes and possible flora disrupt boundaries set by the doubly dominant discourses of neoliberal function and scientism. As propositions, the answerless nature of anecdotal edges and the gross, messy unprettiness of vigNots are efforts to recognize and even thrive with Latour's (2004) collective. Comings-together in the collective are rarely pretty. Inklings, as blobs becoming, combine with imagination as reminders of the speculative importance beyond fact, function, and scientific ways of knowing. Functionally, I could buy inks scientifically designed for precise colours and create art. Inklings, Kinscapes and Possible Flora are, in part, products of the intimate relations with the process of creating inks with place, not simply the colour. In meeting up with inks, colour relations are disrupted as they move colour from medium to intimate partner and kinscape cocreator.

These boundary disruptions are most pronounced with *An Uncommon Field Guide* (Chapter 4) and the *Inklings* exhibition (Chapter 5). Cocker and Maier's (2019) book *No Telos!*, which defines telos as "the formation of new patterns of being and behaviour that resist the utility of a clearly defined outcome or goal" (p. 11), informed the reconfiguring of a field guide. New patterns became experiences that disconnected from a theme or consistent material, affording conglomerates of sketches with collages, inklings, QR codes, photographs, and paintings. Similarly, Loveless's (2019) question "How might the world be organized differently?"—a question that she insists "matters urgently, and [one] that art—particularly art attuned to human and more-than-human social justice—asks in generative and complex ways" (p. 16)—seemed to be in dialogue with Cocker and Maier's (2019) resistance to utility. The mingling of these two works generated a differently organized resistance as thesis. The chapters connect as new patterns of vigNots with inklings and anecdotal edges. An uncommon field guide is an effort to organize differently, to engage with patterns beyond the human lens. The intimacy of place relations for the *Uncommon Field Guide* and *Inklings* exhibition resisted authorship

as human to reorganize as cocreation within a common world. The uncommonness (de la Cadena & Blaser, 2018) of a guide is actively anti-utilitarian and reinforces a glimpse of generative divergence. The invitational nature is also a relaxing of author power found with numbered pages—removing page numbers allows for fluid, personal entry and exit. The result of removing the linear imperative to follow is a way of repatterning noticing habits (Tsing, 2015) away from the scientism of taxonomy. With the asemic writings of grape vines entwining in Chapter 4, the process of pausing and contemplating meaninglessness (Alsobrook, 2017) upends utility and opens the generative space for speculation with emotions and aesthetics. Similarly, the *Inklings* exhibit and speculative collaborations of possible futures attune to alternative patterns with inks, air, time, water, and microbial others as cocreators.

In Chapter 3, the concept of “a sketch becom[ing] a walked story of anecdotes, questions and tensions within these entwined worlds” (Hennessy, Chapter 3) is in dialogue with Chapter 4 and vigNotes:

an alternative, political, possibly disturbing invitation to think and perceive otherwise. The thistle, asphalt, cigarette butt, child, educator, dead grasshopper, puddle moment is a vigNot—a non-romanticized snapshot of the place where othering practices like labelling plants ‘weeds’ becomes an invitation to rethink neighbours. (Hennessy, Chapter 4)

Conceptualizing and thinking with vigNotes is a response to insistence from Latour’s collective. VigNotes are also thinking otherwise with troubling habits (vignettes) that perpetuate romantic separateness of an othered nature. Toxic neighbours do flow down fish drains, dismissed to Plumwood’s (2008) shadow places. The pattern is communicated through sketches with words, asemic writing, and sonic pebbles as examples of Cocker and Maier’s new patterns.

The push-back against convention appears with language directly informing moves away from *The* to *An* (Chapter 4). *An Uncommon Field Guide*, subjectively will only, ever, be one version of infinite possible field guides dependent on place, participants, presents,

pasts, potentials, politics, and more: *The Uncommon Field Guide* cannot exist. The interrogation and dismissal of *The* is a response to the insistence of a more-than-human world. It highlights how simple prepositions are problematic language aligned with provable facts of scientism. In comparison, *An Uncommon Field Guide* becomes a prepositional proposition.

To inform, transform, and reform with anecdotal edges, vigNots and inklings is a resistance to the productivity-informed developmentalism so pervasive in Western models of early childhood education (Kilderry, 2015). Ink blobs, splatters, vigNots, and imagination inform new research methods of ink making with place, uncommoning traditions, and the deromanticizing of child and nature (Pacini-Ketchabaw & Nxumalo, 2016). Children's capabilities provide a foundation that emphasizes the restrictive boundaries of developmental approaches. Children's engagements with common worlds (Common Worlds Research Collective, 2022) inform the collaboratory (Chapter 2) and their kinscape relations (Chapter 4). *An Uncommon Field Guide* would not be possible without the depth and awareness of children's common world relations.

Disrupting boundaries allows for new patterns to emerge: Disrupting the dominance of developmentalism, stewardship, and productivity discourses generates space for alternatives. In the reconfiguring, thinking differently with divergent interests of uncommoning is foregrounded.

Proposition 2: Uncommoning

Uncommoning (de la Cadena & Blaser, 2018; Stengers, 2013) is both a theoretical approach aligned with the common worlds framework and a pedagogical practice in early childhood education that moves away from child-centred practices to divergent perspectives beyond the individual and the human. Uncommoning, as defined by de la Cadena and Blaser (2018), is about having an interest in common but not necessarily the same interest as others. It makes different what, on the surface, is considered similar, highlighting, for example, that while humans and ducks share interest in a pond, these interests are very different.

Uncommoning, as practice, highlights how the intimacies of place and neighbours can easily be subjugated to schedules, instilling and re-instilling problematic othering behaviours that disconnect children from an uncommon world they are part of. To concede unquestioningly to health codes instead of keeping an over-ripe pumpkin, for example, is a lens with consequences. This is not to suggest educators should ignore health practices but rather suggests the powerful possibilities that can result from interrogating practice. Dirtiness and smelliness are factors in healthy living and building defenses for microbial neighbours. As Chapter 2 underlines, “keeping the pumpkin in the class, as acquaintance and more, was an act of forgetting as resistance (Shotwell, 2020). There was defiance and critical inquiry with the act of keeping pumpkin, knowing it would become messy, smelly and filthy and possibly offend the order of classroom ideals (Douglas, 1985)” (Hennessy & Rooney, 2021, p. 8). That resistance to cleanliness, for parents, administrators, and inspectors to get into the *how* of learning in a common world, is a choice. That choice teaches different content. Instead of an earth to be saved by mighty humans, children configure humans as imbricated—one of a divergent multitude. Uncommon understanding resulting from rotten pumpkins and run-off drains changes place from something possessed to a collective, laden within layers of implicated responsibility. Kin relations change when children and educators reconfigure themselves within a common world and adjust to divergent interests.

Uncommoning interrupts concepts of a cursory view to label and classify something, demanding instead closer and slower consideration. These deeper considerations engage with implications for and thinking with more-than-human others. As a process, the creation of an uncommon field guide is predicated on the belief of the divergent abundance of common. As a pedagogical stance, more-than-human divergent perspectives in early childhood contribute to an ecologically respectful and humble approach to thinking beyond the self and beyond the human. In early childhood education, this is movement towards a repositioned understanding of humans as part of, not in charge of.

Uncommoning changes a dead grasshopper as a stroller casualty into a stroller-casualty, nutrient for birds, introduction to death, barometer of ecological imbalance, sign of

Spring, herbivore, source of protein, and devastating locust. As food for many, vegetation devastator, neighbour and noisemaker, a grasshopper is many different things at once. This uncommoning approach is a way of becoming with place and a way of decentring humans in a common worlds curriculum with children.

In gathering observations, experiences, and ideas for *An Uncommon Field Guide*, dead grasshoppers are an example of the unknown potential of site-specific *thinking-doing* (Hodgins et al., 2019). The simplified terminology of labelling it a dead grasshopper gives way to “it depends on which perspective.” From the divergent perspective, it is food for birds, toads, raccoons, flies, squirrels, and more. The engagement with innumerable possibilities is both a pedagogical stance and active thinking-doing.

In the layering of “Uncommon Buckthorn” (Chapters 4, 5) and “Shadow Place (for Val)” (Chapters 4, 5), the thinking-doing of common worlds entwines the visual with the political. This layering of “civilization” symbols with ink kin becomes a defiance of utility (run-off grate and municipal photograph), suggesting instead the provocative nature of utilitarian. Thinking with layers provokes temporalities, geologic time, transparencies, and problems with borders. The porosity of transparency layering can be a method of visualizing entwining in common worlds.

Uncommoning a field guide is a collective endeavour away from the definitive towards the subjective. As one of an infinite number of possible ways to engage with place, it is a living testimony of thinking within a kinscape (Vowel, as cited in Rogers, 2022). It is invitational in manner as an alternative to definitive ways of knowing, instead providing a welcome to thinking otherwise. In uncommoning the field guide, scientifically laden expertise is backgrounded in favour of knowing emotionally, artistically, politically, or philosophically. It isn’t a restricted science club but rather a boundary-defying, all-inclusive system that transcends humans.

To inform, transform, and reform with uncommoning is best understood for its potential with *An Uncommon Field Guide* as pedagogical narration. Early childhood educators and children transform the closed system of developmentalism through the practice of uncommoning—the expertise resides with educators and children, not psychology-based

structures. Furthermore, the interrogative nature of contemplating divergent perspectives opens the lens to consider other interrogations, from classroom ideals and schedules to neoliberal and colonial influences.

Uncommoning contributes a subjective, divergent, layered movement in a shared place. In early childhood education, the concept of *a child* becomes species-member of *a world*. With the movement of uncommoning comes the “co” of collaboratory and cocreation.

Proposition 3: Re-envisioning cocreation

What happens when the place rendered through camera, brush, dance, or story is assigned “title” or “location” instead of coauthor? The tiniest of habits and behaviours with language reinforce a superior human discourse. The challenge, frustration, and stuckness of being unwilling to sign or date cocreated art (Chapter 5) highlights the infamous side of language, specifically English. Assigning place, ink, dead grasshoppers, fish drains, pumpkin rot as “subjects,” “topics,” “titles,” and “locations” but rarely creators is part of how knowledge remains directly linked to dominant discourses of humancentric classification systems (Snaza & Weaver, 2015). The term *creators* incorrectly remains a human domain. As a different kind of relating, the posthuman conundrum of signing and dating is intimately related to composition as a coming-together (Manning, 2013) in an ever-changing ethics of one collective.

In early childhood education, the principle of signing work as individual humans sets problematic humancentric actions as social norms. Even before children can sign artwork, adults act as surrogates and sign and date works for them. I do not suggest this behaviour stop but rather highlight the insidious nature of humans as a priori that extends into art and early childhood education.

Repositioning children as part of a pumpkin and weather collaboratory (Chapter 2), like the vital and generative nature of wood grain and sketch edges (Chapter 3), carries a similar contribution to the dilemma of signing and dating by interrupting othering taxonomy practices that position humans as a priori. Reorienting human individualism in art practices with a “co” of cocreation and collaboratory confronts the power of language and the active, hidden agenda at work with many supposedly innocuous words. Signing

works informs others of individual human authorship, marginalizing materials, intra-actions (Barad, 2007), and the entirety of a more-than-human world. The words *authorship*, *subject*, and *title* with Ink Time and Still Becoming (Chapter 5) echo terminology of *neighbour*, *vignette* and *weed* in Chapter 4 as part of Kimmerer's (2013) grammar of animacy and the role of language in more-than-human relational world making.

6.4 A Conclusion, For Now

In the introduction, I wrote that a common worlds approach in early childhood education supports children to think through interrelations with the world through ethical encounters with a more-than-human world. This thesis is the beginning of a process of engagement and expression with common worlding ways of responding to ecologically precarious times. Through the pairing of common worlds and research-creation, this research contributes to early childhood education understandings of children and their abilities, specifically common worlding, and how both common worlds and research-creation suggest alternative ways of engaging with a precarious planet.

This research makes a number of contributions to early childhood and environmental education. Together, the three provocations of cocreation, uncommoning, and boundary disruption all connect as part of enacting a common worlds (Common World Research Collective, 2022; Taylor, 2013) practice with a precarious planet.

First, learnings from the research underscore children's enormous capabilities at forging common world relations and exceeding restrictive limitations of developmentalism. A nondevelopmental framework in early childhood is both possible and generative. The vibrancy and aliveness of making curriculum with common worlds conveys the depth of knowledge of early childhood educators to contemporize beyond ages and stages and to support complex and ethical interrelations beyond a humancentric lens. In collaborating with pumpkins, weather, buckthorn, wild grapes, black walnuts, sonic pebbles, fish drains, cigarette butts, and sidewalks, both children and educators foreground common worlds and uncommoning as ways, methods, and alternatives to the dominance of

developmentalism and individualism in powerful neoliberal, material, consumerist systems.

Second, the research contributes to ongoing support of uncommoning (de la Cadena & Blaser, 2018) as a fruitful way to support children's interrelations within common worlds (Common Worlds Research Collective, 2022). Uncommoning is also generative when paired with creativity, imagination, and art. Through art, the divergent possibilities in uncommoning took children's staining relations with pumpkin and buckthorn to create a new common worlding method. Colour relations and the influence of what colour does fostered colour relations beyond labelling and identification. Pumpkin change in rotting and buckthorn rain as seed dispersal, food for many, reorient pumpkin and buckthorn from human entertainment and resource to a way of understanding that now includes the many ways pumpkin and buckthorn participate in a common world. Uncommoning is possible through colour and its staining abilities. Berry rain and pumpkin hand prints are examples of what colour does, not what it is.

Uncommoning influences both *An Uncommon Field Guide* (Chapter 4) and the *Inklings* exhibition (Chapter 5) through imaginative and expressive modalities with inks, sidewalks, grapevines, distinct ice/water/weather/rock/child relations, shadow places (Plumwood, 2008), and anecdotal edges (Chapter 3) where fact is backgrounded in favour of possibilities. The complexity and correspondingly complex implications of a sidewalk, fish drain, or grapevine are uncommoning. The creative engagement of conceptualizing field guide visuals differently and embedding the wisdom of children and educators in quotes and original data with QR codes presences sensorial ways of knowing.

To cocreate with more-than-human human others is creative uncommoning at work. The works in the *Inklings* exhibition (Chapter 5) are collaboration with and within common worlds. The superior, human, art behaviours of naming title, artist, date, and material are upended, placing a spotlight on humancentric thinking that claims rights to name, date, and sign works. "Ink Time" and "Still Becoming" exemplify this conundrum. "Kinscapes," "Inklings," and "Possible Flora" are many things at once and continue to

change beyond a human artist. The speculative possibilities from collaborating with ink bring divergent realities to life. The dilemma of words is, again, implicated through art behaviours.

Finally, all three provocations underscore the power of words and the need for greater effort to uncommon language in early childhood education. Language and literacy are staple skills in early childhood. What the research uncovers is that a single word can perpetuate or reconceptualize how humans understand themselves in common worlds. The power of words is not new, but the human superiority that insidiously creeps into simple communications is significant. From problematic prepositions to vigNots, asemic writing to weeds, fish, leaf, and neighbour recognizing the power of words and rethinking the dominance of human, science, productivity bias embedded in common words through language habits is essential. With language, the simple use of an uncommon field guide instead of the authoritative statement-of-fact use of *the* is a powerful shift. From weed to street flower or neighbour as humans to encompass humans, cigarette butts, fish drains, pumpkins or scary black walnuts, *how* and *what* words we use has the power to educate with common worlds or perpetuate the problematic framing of humans as separate from nature. Language becomes another boundary to disrupt as words move thinking from author and artist to cocreator.

References

- Anderson, G. (2019). *Drawing as a way of knowing in art and science*. Intellect.
- Alsobrook, L. (2017). The title of this paper is 〇〇〇γ:∴†††- On asemic writing and the absence of meaning. *IAFOR Journal of Arts & Humanities*, 4(2), 5–13. <https://doi.org/10.22492/ijah.4.2.01>
- Ärlemalm-Hagsér, E., & Sandberg, A. (2011). Sustainable development in early childhood education: In-service students' comprehension of the concept. *Environmental Education Research*, 17(2), 187–200.
- Barad, K. M. (2007). *Meeting the universe halfway*. Duke University Press.
- Bennett, J. (2001). *The enchantment of modern life: Attachments, crossings, and ethics*. Princeton University Press.
- Bennett, J. (2010). *Vibrant matter: A political ecology of things*. Duke University Press.
- Biss, E. (2014). *On immunity: An inoculation*. Graywolf Press.
- Bjornerud, M. (2018). *Timefulness*. Princeton University Press.
- Blaise, M., Hamm, C., & Iorio, J. M. (2017). Modest witness(ing) and lively stories: Paying attention to matters of concern in early childhood. *Pedagogy, Culture, and Society*, 25(1), 31–42. <https://doi.org/10.1080/14681366.2016.1208265>
- Blyth, C., & Meiring, R. (2018). A posthumanist approach to environmental education in South Africa: Implications for teachers, teacher development, and teacher training programs. *Teacher Development*, 22(1), 105–122.
- Bobby, C. (2014). Haptic communication: The unspoken dialogue. *Language in India*, 14(4), 546–547.
- Bolter, J. D. (2016). Posthumanism. In K. B. Jensen & R. T. Craig (Eds.), *The international encyclopedia of communication theory and philosophy* (pp. 1–8). Wiley.
- Bryan, A. (2015). Development education, climate change, and the “imperial mode of living”: Thinking institutionally about the ecological crisis. *Policy and Practice: A Development Education Review*, 21, 1–10.
- Cambridge Dictionary. (n.d.). Common. <https://dictionary.cambridge.org/dictionary/english/common>

- Carson, C. (2007, February). Writing, writing, writing: The natural history field journal as a literary text. *Multimedia*. Doreen Townsend Center for the Humanities. <https://townsendcenter.berkeley.edu/publications/writing-writing-writing-natural-history-field-journal-literary-text>
- Castro, T. (2019). The mediated plant. *E-Flux Journal*, 102. <https://www.e-flux.com/journal/102/283819/the-mediated-plant/>
- Causey, A. (2017). *Drawn to see: Drawing as an ethnographic method*. University of Toronto Press.
- Chakrabarty, D. (2009) The climate of history: Four theses. *Critical Inquiry*, 35(2), 197–222.
- Chapin, F. S., Matson, P. A., & Vitousek, P. (2011). *Principles of terrestrial ecosystem ecology*. Springer Science & Business Media.
- Chapman, O., & Sawchuk, K. (2012). Research-creation: Intervention, analysis and “family resemblances.” *Canadian Journal of Communication*, 37, 5–26.
- Chapman, O., & Sawchuk, K. (2015). Creation-as-research: Critical making in complex environments. *RACAR: Revue d’art Canadienne | Canadian Art Review*, 49–52.
- Cocker, E., & Maier, D. (Eds.). (2019). *No telos!* Beam Editions.
- Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education*. Routledge.
- Common Worlds Research Collective. (2020). *Learning to become with the world: Education for future survival*. UNESCO Futures of Education Report [Commissioned paper]. UNESCO.
- Common Worlds Research Collective. (2022). [Website]. www.commonworlds.net
- Corneau, M. (2016). *The three sisters*. Strong stories Kanyen’keha:ka.
- Cortade, L. (2018). The “microscope of time”: Slow motion in Jean Epstein’s writings. In *Jean Epstein* (pp. 161–176). Amsterdam University Press.
- Culhane, D., & Elliott, D. (2017). *A different kind of ethnography*. University of Toronto Press.
- Dahlberg, G., & Moss, P. (2005). *Ethics and politics in early childhood education*. Routledge Falmer.
- Dahlberg, G., Moss, P., & Pence, A. R. (2013). *Beyond quality in early childhood education and care*. Falmer Press.

- Davies, B. (2014). *Listening to children: Being and becoming*. Routledge.
<https://doi.org/10.4324/9781315770390>
- de la Cadena, M., & Blaser, M. (2018). *A world of many worlds*. Duke University Press.
- DeLanda, M. (2016). *Assemblage theory*. University of Edinburgh Press.
- Doucet, A., & Mauthner, N. (2006). Feminist methodologies and epistemology. In C. D. Bryant & D. L. Peck (Eds.), *21st century sociology: A reference handbook* (pp. 11–36). SAGE.
- Douglas, M. (1985). *Purity and danger: An analysis of concepts of pollution and taboo*. Routledge Classics.
- Duchscher, T. (2021). *Listening to the lessons imprinted beneath our skin: An arts-based murmuration inquiry*. Presentation at “Curriculum and Pedagogy for Uncertain Futures” symposium, Western University, London, ON, April 16.
- Edwards, C., Gandini, L., & Forman, G. (Eds.). (1998). *The hundred languages of children: The Reggio Emilia approach to early childhood education*. Ablex.
- Elliott, S., & Young, T. (2016). Nature by default in early childhood education for sustainability. *Australian Journal of Environmental Education*, 32(1), 57–64.
- Farnsworth, L. (2003). Time use, tempo, and temporality: Occupational therapy’s core business or someone else’s business. *Australian Occupational Therapy Journal*, 50, 116–126.
- Farquhar, S. (2016). Time in early childhood: Creative possibilities with different conceptions of time. *Contemporary Issues in Early Childhood*, 17(4), 409–420.
- Finlay, V. (2007). *Color: A natural history of the palette*. Random House.
- Germein, S. (2017). Place in research: Theory, methodology and methods by Eve Tuck & Marcia McKenzie [Book review]. *Australian Journal of Environmental Education*, 33(3), 226–229. <http://dx.doi.org/10.1017/aee.2017.17>
- Greene, M. (1988). *The dialectic of freedom*. Teachers College Press.
- Greenhough, B. (2016). Vitalist geographies: Life and the more-than-human. In B. Anderson & P. Harrison (Eds.), *Taking-place: Non-representational theories and geography* (pp. 37–54). Routledge.
- Gren, M. (2001). Time-geography matters. In J. May & N. Thrift (Eds.), *Timespace: Geographies of temporality* (pp. 208–225). Routledge.
- Grosz, E. A. (2001). *Architecture from the outside*. The MIT Press.

- Hägglund, S., & Samuelsson, I. P. (2009). Early childhood education and learning for sustainable development and citizenship. *International Journal of Early Childhood*, 41(2), 49.
- Haraway, D. J. (2004). *The Haraway reader*. Routledge.
- Haraway, D. (2008). *When species meet*. University of Minnesota Press.
- Haraway, D. J. (2016). *Staying with the trouble: Making kin in the Chthulucene*. Duke University Press.
- Hennessy, S. (in press). Anecdotal edges: Propositions from sketching the walk as a posthumanist research method. In A. Lasczik, D. Rousell, & A. Cutter-Mackenzie-Knowles (Eds.), *Walking as critical inquiry*. Springer.
- Hennessy, S., & Agarwal, M. (2019). *Soundfullness*. Unpublished pedagogical documentation.
- Hennessy, S., MacAlpine, K.-A., Bacelar de Castro, A., & Agarwal, M. (2020). *Witnessing pathways: The troubling, uncomfortable, real, and imagined stories of witnessing the ruins of progress*. Unpublished pedagogical documentation.
- Hennessy, S. M., & Rooney, T. (2021). Watching change: Attuning to the tempo of decay with pumpkin, weather, and young children. *Children's Geographies*, 1–14.
- Hey, M. (2019). Fermenting communications: Fermentation praxis as interspecies communication. *Public*, 30(59), 149–157.
- Hird, M. (2013). Waste, landfills, and an environmental ethic of vulnerability. *Ethics and the Environment*, 18(1), 105–124.
- Hodgins, B. D., Davies, E., Heydon, R., Khattar, R., & Pacini-Ketchabaw, V. (2019). *Feminist research for 21st-century childhoods: Common worlds methods*. Bloomsbury Academic.
- Ingold, T. (2007). Earth, sky, wind, and weather. *Journal of the Royal Anthropological Institute*, 13(S1), S19–S38. doi: 10.1111/j.1467-9655.2007.00401.x
- Ingold, T. (2011). *Being alive: Essays on movement, knowledge, and description*. Taylor & Francis.
- Ingold, T. (2015). *The life of lines*. Routledge.
- Inoue, M., O’Gorman, L., & Davis, J. (2016). Investigating early childhood teachers’ understandings of and practices in education for sustainability in Queensland: A Japan-Australia research collaboration. *Australian Journal of Environmental Education*, 32(2), 174–191.

- Instone, L. (2015). Risking attachment in the Anthropocene. In K. Gibson, D. B. Rose, & R. Fincher (Eds.), *Manifesto for living in the Anthropocene* (pp. 29–36). Punctum Books.
- Iorio, J. M., Hamm, C., Parnell, W., & Quintero, E. (2017). Place, matters of concern, and pedagogy: Making impactful connections with our planet. *Journal of Early Childhood Teacher Education*, 38(2), 121–135.
- Istead, L., & Shapiro, B. (2014). Recognizing the child as knowledgeable other: Intergenerational learning research to consider child-to-adult influence on parent and family eco-knowledge. *Journal of Research in Childhood Education*, 28(1), 115–127. Academic OneFile.
- Jackson, I. E., Philip, M. N., & Henry-Smith, S. D. (2020, September). Touching the ground. *Canadian Art, Chroma* (Fall), 46–52.
- Kilderry, A. (2015). The intensification of performativity in early childhood education. *Journal of Curriculum Studies*, 47(5), 633–652.
- Kimmerer, R. (2013). *Braiding sweetgrass: Indigenous wisdom, scientific knowledge and the teachings of plants*. Milkweed Editions.
- Kind, S. (2010). Art encounters: Movements in the visual arts and early childhood education. In V. Pacini-Ketchabaw (Ed.), *Flows, rhythms, and intensities of early childhood education curriculum* (pp. 113–131). Peter Lang.
- King, T. (2003). *The truth about stories: A native narrative*. House of Anansi.
- Klein, J., & Loveless, N. (Eds.). (2020). *Responding to site: The performance work of Marilyn Arsem*. Intellect.
- Kopnina, H. (2014). Revisiting education for sustainable development (ESD): Examining anthropocentric bias through the transition of environmental education to ESD. *Sustainable Development*, 22(2), 73–83.
- Kraftl, P. (2015). Alter-childhoods: Biopolitics and childhoods in alternative education spaces. *Annals of the Association of American Geographers*, 105(1), 219–237. <https://doi.org/10.1080/00045608.2014.962969>
- Kraftl, P., & Khan, A. (2019). *Exploring energies of climate change education*. Paper presented at the International Symposium on Climate Change and the Role of Education, Lincoln, UK, April 13.
- Lacy, S. (1995). *Mapping the terrain*. Bay Press.
- Langford, R. (Ed.). (2019). *Theorizing feminist ethics of care in early childhood practice: Possibilities and dangers*. Bloomsbury.

- Lather, P. (2006). Paradigm proliferation as a good thing to think with: Teaching research in education as a wild profusion. *International Journal of Qualitative Studies in Education*, 19(1), 35–57.
- Latour, B. (1993). *We have never been modern*. Harvard University Press.
- Latour, B. (1999). *Pandora's hope: Essays on the reality of science studies*. Harvard University Press.
- Latour, B. (2004). *Politics of nature: How to bring the sciences into democracy*. Harvard University Press.
- Latour, B. (2011). Politics of nature: East and West perspectives. *Ethics & Global Politics*, 4(1), 71–80.
- Law, J., & Lynch, M. (1988). Lists, field guides, and the descriptive organization of seeing: Birdwatching as an exemplary observational activity. *Human Studies*, 271–303.
- Lenz Taguchi, H. (2010). *Going beyond the theory/practice divide in early childhood education: Introducing an intra-active pedagogy*. Routledge.
- Logan, J. (2018). *Make ink: A forager's guide to natural inkmaking*. Abrams.
- Loveless, N. (2019). *How to make art at the end of the world: A manifesto for research-creation*. Duke University Press.
- MacCormack, P., & Gardner, C. (2018). *Ecosophical aesthetics art, ethics and ecology with Guattari*. Bloomsbury Academic.
- Mann, B. (1997). The lynx in time: Haudenosaunee women's traditions and history. *American Indian Quarterly*, 21(3), 423–449.
- Manning, E. (2013). *Always more than one: Individuation's dance*. Duke University Press.
- Massey, D. B. (2003). Some times of space. In S. May (Ed.), *Olafur Eliasson: The Weather Project* (pp. 107–118). Tate.
- McClintock, J. I. (1994). *Nature's kindred spirits: Aldo Leopold, Joseph Wood Krutch, Edward Abbey, Annie Dillard, and Gary Snyder*. University of Wisconsin Press.
- McKittrick, K. (2020). *Dear science and other stories*. Duke University Press.
- Morton, T. (2013). *Hyperobjects: Philosophy and ecology after the end of the world*. University of Minnesota Press.
- Moss, P. (2017). Power and resistance in early childhood education: From dominant discourse to democratic experimentalism. *Journal of Pedagogy*, 8(1), 11–32.

- Munro, A. (1983). The moons of Jupiter. In *Chaddeleys and Flemings*, Vol. 1 (pp. 30–39). Penguin Books.
- Myers, M. (2010). “Walk with me, talk with me”: The art of conversive wayfinding. *Visual Studies*, 25(1), 59–68. <https://doi.org/10.1080/14725861003606894>
- Nairn, K., & Kraftl, P. (Eds.). (2016). *Space, place, and environment*. Springer Reference.
- National Centre for Truth and Reconciliation. (2015). *Truth and Reconciliation Commission Report*. National Centre for Truth and Reconciliation. <https://nctr.ca/records/reports/>
- Nelson, N., Pacini-Ketchabaw, V., & Nxumalo, F. (2018). Rethinking nature-based approaches in early childhood education: Common worlding practices. *Journal of Childhood Studies*, 43(1), 4–14. <https://doi.org/10.18357/jcs.v43i1.18261>
- Nicolaides, K. (1969). *The natural way to draw*. Houghton Mifflin.
- O’Malley, S. (2015). The relationship between children’s perceptions of the natural environment and solving environmental problems. *Policy and Practice: A Development Education Review*, 21, 87–104.
- O’Sullivan, S. (2005). *Art encounters Deleuze and Guattari: Thought beyond representation*. Springer.
- Pacini-Ketchabaw, V., & Heydon, R. (2019, October 18). *Ontario pedagogists*. Provincial Centre for Excellence in Early Childhood.
- Pacini-Ketchabaw, V., & Kummen, K. (2016). Shifting temporal frames in children’s common worlds in the Anthropocene. *Contemporary Issues in Early Childhood*, 17(4), 431–441.
- Pacini-Ketchabaw, V., & Nxumalo, F. (2016). Unruly raccoons and troubled educators: Nature/culture divides in a childcare centre. *Environmental Humanities*, 7(1), 151–168.
- Pacini-Ketchabaw, V., & Taylor, A. (2015). *Unsettling the colonial places and spaces of early childhood education*. Routledge.
- Pacini-Ketchabaw, V., Taylor, A., & Blaise, M. (2016). Decentring the human in multispecies ethnographies. In C. A. Taylor & C. Hughes (Eds.), *Posthuman research practices in education* (pp. 149–167). Springer.
- Pearson, E., & Degotardi, S. (2009). Education for sustainable development in early childhood education: A global solution to local concerns? *International Journal of Early Childhood*, 41(2), 97.

- Polt, R. F. H. (2018). *The task of philosophy in the Anthropocene*. Rowman & Littlefield International.
- Philippon, D. (2004). *Conserving words: How American nature writers shaped the environmental movement*. University of Georgia Press.
- Pitt, H. (2015). On showing and being shown plants: A guide to methods for more-than-human geography. *Area*, 47(1), 48–55.
- Plumwood, V. (1993). *Feminism and the mastery of nature*. Routledge.
- Plumwood, V. (2008). Shadow places and the politics of dwelling. *Australian Humanities Review*, 44, 139–150.
- Plumwood, V. (2009). Nature in the active voice. *Australian Humanities Review*, 46.
- Pollitt, J., Blaise, M., & Rooney T., (2021) Weather bodies: Experimenting with dance improvisation in environmental education in the early years, *Environmental Education Research*, 27(8), 1141–1151. doi:10.1080/13504622.2021.1926434
- Poon, L. (2019, November 10). What to do with that rotting pumpkin corpse: Millions end up rotting in landfills. But Halloween’s leftover pumpkins don’t have to go to waste. *The Atlantic*. <https://www.theatlantic.com/science/archive/2019/11/where-pumpkins-go-after-halloween/601699/>
- Puig de la Bellacasa, M. (2009). Touching technologies, touching visions: The reclaiming of sensorial experience and the politics of speculative thinking. *Subjectivity*, 28(1), 297.
- Puig de la Bellacasa, M. (2017). *Matters of care: Speculative ethics in more than human worlds*. University of Minnesota Press. <https://doi.org/10.5749/j.ctt1mmfspt>
- Ritchie, J. (2012). Early childhood education as a site of ecocentric counter-colonial endeavour in Aotearoa New Zealand. *Contemporary Issues in Early Childhood*, 13(2), 86–98.
- Ritchie, J. (2016). Qualities for early childhood care and education in an age of increasing superdiversity and decreasing biodiversity. *Contemporary Issues in Early Childhood*, 17(1), 78–91.
- Rogers, S. (Director). (2022, April 14). In Buffalo is the New Buffalo, Chelsea Vowel challenges sci-fi tropes and explores Métis futurism. *The Last Chapter*. CBC. <https://www.cbc.ca/radio/thenextchapter/full-episode-april-16-2022-1.6416792>
- Rooney, T. (2019) Weathering time: Walking with young children in a changing climate. *Children’s Geographies*, 17(2), 177–189. doi:10.1080/14733285.2018.1474172
- Royle, N. (2003). *The uncanny*. Manchester University Press.

- Samuelsson, I. P., & Park, E. (2017). How to educate children for sustainable learning and for a sustainable world. *International Journal of Early Childhood*, 49(3), 273–285.
- Sauvé, L. (2005). Currents in environmental education: Mapping a complex and evolving pedagogical field. *Canadian Journal of Environmental Education*, 10(1), 11–37.
- Scheese, D. (1996). *Nature writing: The pastoral impulse in America*. Twayne.
- Shaffer, M. S., & Young, P. S. K. (2015). *Rendering nature: Animals, bodies, places, politics*. University of Pennsylvania Press.
- Shotwell, A. (2016). *Against purity: Living ethically in compromised times*. University of Minnesota Press.
- Shotwell, A. (2020). *Education without extractivism: Settler practices for respecting Indigenous sovereignties in entangled worlds*. Keynote talk presented at Responding to Ecological Challenges with/in Contemporary Childhoods: An Interdisciplinary Colloquium on Climate Pedagogies, London, ON, January 31.
- Simpson, L. B. (2017). *As we have always done: Indigenous freedom through radical resistance*. University of Minnesota Press.
- Sinner, A., Irwin, R., & Adams, J. (Eds.). (2019). *Provoking the field: International perspectives on visual arts PhDs in education*. Intellect, The University of Chicago Press.
- Smailbegović, A. (2015). Cloud writing: Describing soft architectures of change in the Anthropocene. In H. Davis & E. Turpin (Eds.), *Art in the Anthropocene: Encounters among aesthetics, politics, environments and epistemologies*. Open Humanities Press.
- Smith, L. T., Tuck, E., & Yang, K. W. (Eds.). (2019). *Indigenous and decolonizing studies in education: Mapping the long view*. Taylor & Francis.
- Snaza, N., & Weaver, J. (2015). *Posthumanism and educational research*. Routledge.
- Social Sciences and Humanities Research Council of Canada. (n.d.). Research creation. <https://www.sshrc-crsh.gc.ca/funding-financement/programmes-programmes/definitions-eng.aspx#a22>
- St. Pierre, E. A. (2013). The appearance of data. *Cultural Studies – Critical Methodologies*, 13(4), 223–227.
- St. Pierre, E. A. (2018). Writing post qualitative inquiry. *Qualitative Inquiry*, 24(9), 603–608. <https://doi.org/10.1177/1077800417734567>

- Stengers, I. (2005). Deleuze and Guattari's last enigmatic message. *Angelaki : Journal of Theoretical Humanities*, 10(2), 151–167.
<https://doi.org/10.1080/09697250500417399>
- Stengers, I. (2011). *Thinking with Whitehead*. Harvard University Press.
- Stengers, I. (2013). Matters of cosmopolitics: On the provocations of Gaïa (in conversation with Heather Davis and Etienne Turpin). In E. Turpin (Ed.), *Architecture in the Anthropocene: Encounters among design, deep time, science and philosophy* (pp. 171–182). Open Humanities Press.
- Styres, S. D. (2011). Land as first teacher: A philosophical journeying. *Reflective Practice*, 12(6), 717. <https://doi.org/10.1080/14623943.2011.601083>
- Sweeney, J. (2015). Climate change and development education: New opportunities for partnership. *Policy and Practice: A Development Education Review*, 20, 11–30.
- Taylor, A. (2011). Reconceptualizing the “nature” of childhood. *Childhood*, 18(4), 420–433.
- Taylor, A. (2013). *Reconfiguring the natures of childhood*. Routledge.
- Taylor, A. (2017). Beyond stewardship: Common world pedagogies for the Anthropocene. *Environmental Education Research*, 23(10), 1448–1461.
- Taylor, A. (2018). Situated and entangled childhoods: Imagining and materializing children's common world relations. In M. Bloch, B. B. Swadener, & G. S. Cannella (Eds.), *Reconceptualizing early childhood education and care-a reader: Critical questions, new imaginaries & social activism* (pp. 205–214). Peter Lang.
- Taylor, A. (2019). Countering the conceits of the Anthropos: Scaling down and researching with minor players. *Discourse: Studies in the Cultural Politics of Education*, 0(0), 1–19. <https://doi.org/10.1080/01596306.2019.1583822>
- Taylor, A., Blaise, M., & Giugni, M. (2013). Haraway's “bag lady story-telling”: Relocating childhood and learning within a “post-human landscape.” *Discourse: Studies in the Cultural Politics of Education*, 34(1), 48–62.
- Taylor, A., & 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.
- Tishman, S. (2018). *Slow looking*. Routledge.
- Truman, S. (2018). SF! Haraway's situated feminisms and speculative fabulations in English class. *Studies in Philosophy and Education*, 38(1), 31–42.
<https://doi.org/10.1007/s11217-018-9632-5>

- Truman, S. (2022, June 1). Undisciplined: Research-creation and what it may offer (traditional) qualitative research methods. *Qualitative Inquiry*. <https://doi.org/10.1177/10778004221098380>
- Tsing, A. L. (2015). *The mushroom at the end of the world: On the possibility of life in capitalist ruins*. Princeton University Press.
- Tsing, A. L., Swanson, H., Gan, E., & Bubandt, N. (Eds.). (2017). *Arts of living on a damaged planet*. University of Minnesota Press.
- Tuck, E., McKenzie, M., & McCoy, K. (2014). Land education: Indigenous, post-colonial, and decolonizing perspectives on place and environmental education research. *Environmental Education Research*, 20(1), 1–23. <https://doi.org/10.1080/13504622.2013.877708>
- van Dooren, T., Kirksey, E., & Münster, U. (2016). Multispecies studies. *Environmental Humanities*, 8(1), 1–23. <https://doi.org/10.1215/22011919-3527695>
- Vowel, C. (2022). *Buffalo is the new Buffalo*. Arsenal Pulp Press.
- Vranken, I. (2020). Rooted hauntology lab: Attempts at vegetal curation. *Performance Philosophy*, 5(2), 236–251.
- Wals, A. E. (2017). Sustainability by default: Co-creating care and relationality through early childhood education. *International Journal of Early Childhood*, 49(2), 155–164.
- Watts, V. (2013). Indigenous place-thought and agency amongst humans and non humans (First Woman and Sky Woman go on a European world tour!). *Decolonization: Indigeneity, Education & Society*, 2(1), 20–34.
- Wilson, H. (2017). On geography and encounter: Bodies, borders, and difference. *Progress in Human Geography*, 41(4), 451–471.
- Woods, H., Nelson, N., Yazbeck, S.-L., & Danis, I. (2018). With(in) the forest: (Re)conceptualizing pedagogies of care. *Journal of Childhood Studies*, 43(1), 44.
- Yusoff, K. (2018). Politics of the Anthropocene: Formation of the commons as a geologic process. *Antipode*, 50(1), 255–276.

Appendices

List of Appendices

- Appendix A. Letter of Information and Consent (Families)
- Appendix B. Letter of Information and Consent (Educators)
- Appendix C. Ethics Approval Letter
- Appendix D. Continuing Ethics Approval
- Appendix E. Confidentiality Agreement
- Appendix F. Curriculum Vitae
- Appendix G. The Uncommon Field Guide
- Appendix H. Inklings Exhibit Catalogue

Appendix A. Letter of Information and Consent (Families)



Letter of Information and Consent

Climate Action Network: Exploring climate change pedagogies with children Letter of Information and Consent – Families

Principal Investigator

Dr. Veronica Pacini-Ketchabaw, Faculty of Education
Western University, [REDACTED]

1. Invitation to Participate

Your child is being invited to participate in this research study about developing climate change pedagogies with children because he/she is enrolled in [NAME OF CHILD CARE CENTRE] and one or more of the educators at your child's classroom have agreed to participate in this study. The child care centre is a partner in the project. The Association of Early Childhood Educators Ontario (AECEO) and Early Childhood Educators of British Columbia (ECEBC) are also partners in the Climate Action Network.

2. Why is this study being done?

The purpose of this project is to advance our understanding of children's relations with their environment in order to synthesize knowledge at local, national, and global levels regarding children's creative responses to the impacts of climate change. We are interested in how children engage creatively to address climate change related impacts on animals, trees, food, energy, and weather within their own local contexts. Your child is invited to participate in an inquiry on climate change. In addition, we are interested in the roles early childhood practitioners play in working with children to creatively and locally respond to climate-related issues. We hope that such knowledge will help us create effective and engaging new curricula, pedagogies, and policies.

3. How long will you be in this study?

It is expected that your child will be in the study for one school year, between 6 to 9 months. The collection of data will begin after [DATE (September, xxxx)] and will be ongoing during this academic year.

Your child will participate in the project during regular child care hours. Researchers will visit your child's classroom once or twice a week (approximately 3 hours per visit) during this period to work alongside classroom educators.

Please note that the educator might or might not choose to extend the activities with children (without the researchers being present) more than twice a week, during the regular programming.

4. What are the study procedures?

This is a participatory and collaborative project. If you agree to voluntarily let your child participate, her/his participation will be through his/her engagement in classroom activities and the pedagogical documentation that reflects this participation.

As outlined in the provincial [or national in the UK and AU case] pedagogical documentation is part of the regular pedagogical practices in your child's classroom. Children and educators participate in pedagogical inquiries and documentation as part of the regular activities and events of the child care program. This project is distinct from the regular pedagogical activities of the centre in that selected data will be collected from the regular documentation for analysis and dissemination beyond the centre.

The process of pedagogical documentation involves recording of the inquiry (both by educators and by project team), and individual and collective discussions with educators and children based on the recordings. The purpose of these discussions will be to:

- (a) make visible the learning that takes place in everyday practices in the program;
- (b) deepen and extend the activities observed; and
- (c) follow children's interests and curiosities.

Daily practices that relate to issues of [select one: food, weather, plants, animals, and energy] will be recorded using video, photographs, and field notes. Videos and photographs of your child will be taken only with your permission. In addition, if we have your permission, we will ask children to provide verbal assent to indicate their voluntary participation in the photos and videos.

It is anticipated that researchers will share with others the results of this project in the following ways:

- Through an art exhibit
- In publications and presentations, for example in books, chapters, articles in refereed and professional journals, academic and professional conferences, white papers.
- In masters or doctoral theses.
- In project website and professional social media (see below for more information)

Photographs and video recordings that include children's faces might be used in publications and presentations, if permission is given. However, NO images of children's faces (i.e., images where children are recognizable) will be used online. (Please see the section on Anonymity & Confidentiality below for more information.)

Some of the information collected and the ongoing analyses will also be shared through the project's website (e.g., in a blog) and professional social media accounts (e.g., Twitter). Circulating research knowledge through online platforms will increase the scope of the provincial, national and international audience that our research is shared with. Utilizing a professional research website and Twitter allows researchers to readily connect and share inquiry analyses in an accessible form with early childhood educators, students, scholars, and research institutions and units worldwide. This is vital for the sharing of learning to help build knowledge in the field of environmental early childhood education pedagogy and to improve climate change practices for children.

An example of research websites where ongoing pedagogical documentation is shared through a blog is the Common World Childhoods Research Collective at <http://commonworlds.net>. Examples of social media use (i.e., Twitter) with research inquiries can also be found on this site.

Your child's educator will act as co-researchers in the process of the research. The educator will have access to the pedagogical documentation collected in the program to use according to your Centre's guidelines. The educator might or might not choose to:

- incorporate ideas generated through the project into his/her daily practices for further observation and interpretation
- display some of the information collected and the ongoing analyses in your classroom.
- communicate the ongoing analyses through regular updates via your classroom's newsletter so you are aware of the activities in which your child is participating as well as the learning that takes place in everyday practices at the centre
- disseminate the findings in articles in professional magazines, and at conference presentations.
- contribute entries to the project website blog and professional social media accounts.

5. What are the risks and harms of participating in this study?

There are no known or anticipated risks or discomforts associated with participating in this study. However, participation in this study may cause some inconvenience to your child.

An inconvenience for children might be the interruption or intrusion of being recorded while engaged in daily activities. Since both photography and video are currently used

in the centres by the educators, the intrusion will be the presence of the researcher collecting documentation. If this occurs, recording will be stopped. It is expected that the children will eventually become familiar with the presence of the researchers and this will stop being intrusive.

6. What are the benefits of participating in this study?

The potential benefits to your child include the learning that will take place during their participation in the project.

The possible benefits to educators may be to have further insights into how to engage pedagogically with issues related to climate change.

This research project may generate potential benefits to society, such as the possibility of increased understanding about how to address issues of climate change through early childhood education practices. It may also help researchers understand how young children can learn about climate issues.

7. Can participants choose to leave the study?

If you decide to withdraw your child from the study, you have the right to request withdrawal of information collected about your child. If you wish to have your information removed please let the researcher know. Choosing to withdraw from the study will not impact your relationship with the child care centre or any other institutions connected with the research study.

However, please note that it will be very difficult for us to remove what your child had said during group conversations. This is due primarily to the fact that after removing one person's dialogue in a discussion, the entire conversation might not make sense in total. We will minimize your child's data to respect your decision to withdraw him/her while ensuring that we can still gain a good understanding of other participants' experiences and insights.

When photos/videos are involved, we will crop the images and delete clips that involve your child.

8. How will participants' information be kept confidential?

Representatives of The University of Western Ontario Non-Medical Research Ethics Board may require access to your study-related records to monitor the conduct of the research.

Your child's participation in this study will not be kept confidential from their educator. The educators participating in the study will know which children are participating in the study in order to know who can and cannot be included in pedagogical documentation shared with the researchers.

While we do our best to protect your child's information there is no guarantee that we will be able to do so. The inclusion of your child's images through photographs and videos may allow someone to link the data and identify him/her.

Any photographs and/or video recordings to be shared on the project website and through professional social media accounts (e.g., Twitter) might have partial images of children (e.g., hands visible, feet visible) but will NOT have images of children that are recognizable (i.e., no faces will be visible).

We acknowledge the importance of your child's privacy, but are not able to assure absolute confidentiality. As with any person working with children, we are bounded by the professional and legal obligations of duty to report.

The researcher will keep any personal information about your child in a secure and confidential location for a minimum of 5 years. A list linking your child's study number with his/her name will be kept by the researcher in a secure place, separate from his/her study file. As well as making sure any identifying information is stored securely please note the following:

- If the results of the study are published, your child's name will not be used.
- Researchers might use your child's personal quotes in the dissemination of the project.
- Please be advised that although the researchers will take every precaution to maintain confidentiality of the data, the nature of group research with children prevents the researchers from guaranteeing confidentiality. The researchers would like to families to respect the privacy of other children participants in the classroom and not repeat what is said in the group meetings to others.
- In addition, your child will be able to be identified by the child care setting community (i.e., educators in your centre, other families) and potentially by other child care settings in the community (given the size the community).

9. Are participants compensated to be in this study?

You and your child will not be compensated for participation in this research.

10. What are the rights of participants?

Your child's participation in this study is voluntary. You may decide not to let your child take part in this study. Even if you consent for your child to participate he/she has the right to not answer individual questions or to withdraw from the study at any time. If your child chooses not to participate or you choose to withdraw your child from the study at any time it will have no effect on your child's care and education.

It is possible that you may feel influenced to participate because your child's educator is a participant or because [NAME OF CENTRE] is a partner in this project. It is important to stress that your child's participation in this research must be completely voluntary. If

you feel influenced to be involved because of this perceived power-over relationship, you should decline participation.

We will provide you with an update if the nature of the research changes during the duration of your child's participation in the study, this will ensure that you always have current information in making decisions of whether you would like your child to remain a participant in the study.

You do not waive any legal right by signing this consent form.

11. Whom do participants contact for questions?

You are encouraged to ask any clarifying questions with regard to your child's participation in this research and I will answer your questions to the best of my knowledge and your satisfaction.

If you have questions about this research study please contact Dr. Veronica Pacini-Ketchabaw, [REDACTED].

If you have any questions about your rights as a research participant or the conduct of this study, you may contact The Office of Human Research Ethics ([REDACTED])
[REDACTED]

This letter is yours to keep for future reference.

Consent

Project Title: Climate Action Network: Exploring climate change pedagogies with children

Letter of Information and Consent – Families

Principal Investigator

Dr. Veronica Pacini-Ketchabaw, Faculty of Education

Western University, [REDACTED]

I have read the Letter of Information, have had the nature of the study explained to me and I agree for my child to participate. All questions have been answered to my satisfaction.

I agree for my child to be photographed in this research

YES NO

I agree for my child to be audio-recorded in this research

YES NO

I agree for my child to be video-recorded in this research

YES NO

I consent to the use of images of my child (including his/her face) obtained during the study in publications and presentations

YES NO

I consent to the use of partial images of my child (e.g., hands visible, feet visible) obtained during the study in the project website and researchers' professional social media accounts

YES NO

I consent to the use of my child's personal, identifiable quotes obtained during the study in the dissemination of this research

YES NO

I consent to the use of my child's unidentified quotes obtained during the study in the dissemination of this research

YES NO

My signature (Dr. Veronica Pacini-Ketchabaw) means that I have explained the study to the participant named above. I have answered all questions.

_____	_____	_____
Print Name of Person	Signature	<i>Date (DD-MMM-</i>
Obtaining Consent		<i>YYYY)</i>
Child's Name:	_____	

Parent / Legal Guardian / Substitute Decision Maker (Print): _____
Parent / Legal Guardian / Substitute Decision Maker (Sign): _____
Parent / Legal Guardian / Substitute Decision Maker (Date): _____

Appendix B. Letter of Information and Consent (Educators)



Letter of Information and Consent

Climate Action Network: Exploring climate change pedagogies with children Letter of Information and Consent – Educators

Principal Investigator

Dr. Veronica Pacini-Ketchabaw, Faculty of Education
Western University, [REDACTED]

1. Invitation to Participate

You are being invited to participate in this research study about developing climate change pedagogies with children because you are an educator at [NAME OF CHILD CARE CENTRE]. The child care centre is a partner in the project. The Association of Early Childhood Educators Ontario (AECEO) and Early Childhood Educators of British Columbia (ECEBC) are also partners in the Climate Action Network.

2. Why is this study being done?

The purpose of this project is to advance our understanding of children's relations with their environment in order to synthesize knowledge at local, national, and global levels regarding children's creative responses to the impacts of climate change. We are interested in how children engage creatively to address climate change related impacts on animals, trees, food, energy, and weather within their own local contexts. Your child is invited to participate in an inquiry on climate change. In addition, we are interested in what roles early childhood practitioners play in working with children to creatively and locally respond to climate-related issues. We hope that such knowledge will help us create effective and engaging new curricula, pedagogies, and policies.

3. How long will you be in this study?

It is expected that you will be in the study for one school year, between 6 to 9 months. The collection of data will begin after [DATE (September, xxxx)] and will be ongoing during this academic year. The anticipated total time commitment for this study is approximately 234 hours.

You will participate in the project during your regular working hours. Researchers will visit your classroom once or twice a week (approximately 3 hours per visit) during this

period to work alongside you. You may or may not choose to extend the activities with children (without the researchers being present) more than twice a week, during your regular programming.

In addition, there will be a 2 hour evening group discussion meeting once a month during the school year to revisit and interpret the documentation collected. You may or may not choose to dedicate additional time to your own analysis of the pedagogical narrations. If so, you will determine the minimum/maximum amount of time beyond work hours devoted to this project.

4. What are the study procedures?

This is a participatory and collaborative project. If you agree to voluntarily let your child participate, his/her participation will be through his/her engagement in classroom activities and pedagogical documentation, that reflects this participation.

As outlined in the provincial pedagogical documentation Is part of the regular pedagogical practices in your child's classroom. Children and educators participate in pedagogical inquiries and documentation as part of regular pedagogical activities of the centre in that selected data will be collected from the regular documentation for analysis and dissemination beyond the centre.

The process of pedagogical documentation involves recording of moments of practice (both by yourself and by the researchers), and individual and collective discussions with you (both during activity time and in scheduled meetings) based on the recordings. The purpose of these discussions will be to:

- (a) make visible the learning that takes place in everyday practices in the program;
- (b) deepen and extend the activities observed; and
- (c) follow children's interests and curiosities.

You may or may not choose to incorporate ideas generated by these analyses into your daily practices for further observation and interpretation.

Practices will be recorded using video, photographs, and field notes. Videos and photographs will be taken of you only with your permission.

You will also be responsible for attending evening discussion meetings related to the pedagogical inquiry. Researchers will also take notes during/after evening discussion meetings. Some of the scheduled meetings will be video or audio recorded for later revisiting. During these meetings, videos of you will be taken only with your permission.

You will have access to the pedagogical documentation collected from your own program to use according to your Centre's guidelines.

It is anticipated that researchers will share with others the results of this project in the following ways:

- Through an art exhibit
- In publications and presentations, for example in books, chapters, articles in refereed and professional journals, academic and professional conferences, white papers.
- In masters or doctoral theses.
- In project website and professional social media (see below for more information)

Photographs and video recordings that include educators' faces might be used when sharing results of this project, if permission is given.

Some of the information collected and the ongoing analyses will also be shared through the study website (e.g., in a blog) and professional social media accounts (e.g., Twitter). Circulating research knowledge through online platforms will increase the scope of the provincial, national and international audience that our research is shared with. Utilizing a professional research website and Twitter allows researchers to readily connect and share inquiry analyses in an accessible form with early childhood educators, students, scholars, and research institutions and units worldwide. This is vital for the sharing of learning to help build knowledge in the field of environmental early childhood education pedagogy and to improve climate change practices for children.

An example of research websites where ongoing pedagogical documentation is shared through a blog is the Common World Childhoods Research Collective at <http://commonworlds.net>. Examples of social media use (i.e., Twitter) with research inquiries can also be found on this site.

As a co-researcher, you might or might not choose to:

- display some of the information collected and the ongoing analyses in your classroom.
- communicate the ongoing analyses through regular updates via your classroom's newsletter so parents are aware of the activities in which their child is participating as well as the learning that takes place in everyday practices at the centre.
- disseminate the findings in articles in professional magazines, and at conference presentations.
- contribute entries to the project website blog and professional social media accounts.

5. What are the risks and harms of participating in this study?

There are no known or anticipated risks or discomforts associated with participating in this study. However, participation in this study may cause some inconvenience to you.

Engaging in discussions related to your pedagogical narrations during staff meetings might detract you from other activities.

An inconvenience for children and for you might be the interruption or intrusion of being recorded while engaged in daily activities. If this occurs, recording will be stopped. Another potential inconvenience to you, if you choose to be part of the project outside working hours, is that that time will be taken from other non-work related activities of your life.

6. What are the benefits of participating in this study?

The potential benefits for children include the learning that will take place during their participation in the project.

The possible benefits to you may be to have further insights into how to engage pedagogically with issues related to climate change.

This research project may generate potential benefits to society, such as the possibility of increased understanding about how to address issues of climate change through early childhood education practices. It may also help researchers understand how young children can learn about climate issues.

You will be provided with a certificate that acknowledges your participation in monthly, evening meetings.

7. Can participants choose to leave the study?

If you decide to withdraw from the study, you have the right to request withdrawal of information collected about you. If you wish to have your information removed please let the researcher know. Choosing to withdraw from the study will not impact your relationship with the child care centre or any other institutions connected with the research study.

However, please note, that it will be very difficult for us to remove what you have said during the group sessions. This is due primarily to the fact that after removing one person's dialogue in a discussion, the entire conversation might not make sense in total. We will minimize your data to respect your decision to withdraw while ensuring that we can still gain a good understanding of other participants' experiences and insights. When photos/videos are involved, we will crop the images and delete clips that involve you.

8. How will participants' information be kept confidential?

Representatives of The University of Western Ontario Non-Medical Research Ethics Board may require access to your study-related records to monitor the conduct of the research.

While we do our best to protect your information there is no guarantee that we will be able to do so. The inclusion of your images through photographs and videos may allow someone to link the data and identify you.

We acknowledge the importance of your privacy, but are not able to assure absolute confidentiality. As with any person working with children, we are bounded by the professional and legal obligations of duty to report.

The researcher will keep any personal information about you in a secure and confidential location for a minimum of 5 years. A list linking your study number with

your name will be kept by the researcher in a secure place, separate from your study file. If the results of the study are published, your name will not be used.

You may however want to consent for us to reveal your identity when you are co-authoring articles/chapters/presentations with us. We will ask for your consent every time an opportunity for publication arises.

In addition, given the collaborative nature of this research, you might decide to waive your confidentiality.

Researchers might use your personal quotes in the dissemination of the project.

Please be advised that although the researchers will take every precaution to maintain confidentiality of the data, the nature of group meetings prevents the researchers from guaranteeing confidentiality. The researchers would like to remind participants to respect the privacy of your fellow participants and not repeat what is said in the group meetings to others.

In addition, you will be able to be identified by your own child care setting community (i.e., colleagues in your centre, families) and potentially by other child care settings in the community (given the size of our community).

9. Are participants compensated to be in this study?

If you agree to participate in this study, we will issue a certificate of participation for the meetings that take place outside working hours which could be used towards your professional development hours. Please note that this certificate must not be coercive. It is unethical to provide undue compensation or inducements to research participants. If you would not participate if the compensation were not offered, then you should decline. If you agree to participate in this study, this form of compensation to you must not be coercive.

If you withdraw from the study, you will still receive a certificate for the professional development hours you have completed up to the withdrawal date. If you do withdraw from the study, and no other educators from your classroom are participants in this study, the children participants from your classroom will also be withdrawn from the study.

10. What are the rights of participants?

Your participation in this study is voluntary. You may decide not to be in this study. Even if you consent to participate you have the right to not answer individual questions or to withdraw from the study at any time. If you choose not to participate or to leave the study at any time it will have no effect on your employment status.

It is possible that you may feel influenced to participate because [NAME OF CENTRE] is a partner in this project. It is important to stress that your participation in this research must be completely voluntary. If you feel influenced to be involved because of this perceived power-over relationship, you should decline participation.

We will give you new information that is learned during the study that might affect your decision to stay in the study.

You do not waive any legal right by signing this consent form.

11. Whom do participants contact for questions?

You are encouraged to ask any clarifying questions with regard to your participation in this research and I will answer your questions to the best of my knowledge and your satisfaction.

If you have questions about this research study please contact Dr. Veronica Pacini-Ketchabaw, [REDACTED]

If you have any questions about your rights as a research participant or the conduct of this study, you may contact The Office of Human Research Ethics (519) 661-3036, email: ethics@uwo.ca.

This letter is yours to keep for future reference.

Consent

Project Title: Climate Action Network: Exploring climate change pedagogies with children

Letter of Information and Consent – Educators

Principal Investigator

Dr. Veronica Pacini-Ketchabaw, Faculty of Education

Western University, ([REDACTED])

I have read the Letter of Information, have had the nature of the study explained to me and I agree to participate. All questions have been answered to my satisfaction.

I agree to be audio-recorded in this research

YES NO

I agree to be video-recorded in this research

YES NO

I consent to the use of images of myself obtained during the study in the project in the project website and researchers' professional social media accounts

YES NO

I consent to the use of personal, identifiable quotes obtained during the study in the dissemination of this research

YES NO

I consent to the use of unidentified quotes obtained during the study in the dissemination of this research

YES NO

I agree to have my name used in the dissemination of this research

YES NO

_____	_____	_____
Print Name of Participant	Signature	<i>Date (DD-MMM-YYYY)</i>

My signature means that I have explained the study to the participant named above. I have answered all questions.

_____	_____	_____
Print Name of Person Obtaining Consent	Signature	<i>Date (DD-MMM-YYYY)</i>

Appendix C. Ethics Approval Letter



Research Ethics

Western University Non-Medical Research Ethics Board NMREB Delegated Initial Approval Notice

Principal Investigator: Dr. Veronica Pacini-Ketchabaw
Department & Institution: Education/Faculty of Education, Western University

NMREB File Number: 109337
Study Title: Climate Action Network: Exploring climate change pedagogies with children

NMREB Initial Approval Date: September 06, 2017
NMREB Expiry Date: September 06, 2018

Documents Approved and/or Received for Information:

Document Name	Comments	Version Date
Western University Protocol		2017/06/27
Recruitment Items	Appendix A - Information Session	2017/05/07
Recruitment Items	Appendix B - Email reminder to be sent to Educators	2017/05/08
Recruitment Items	Appendix C: Families - Invite to Info Session	2017/06/27
Recruitment Items	Appendix D - Verbal reminder to families provided by Educators	2017/05/08
Assent	Appendix E - Children Assent	2017/05/08
Other	Appendix F - Confidentiality Agreement	2017/05/08
Letter of Information & Consent	Educators	2017/09/05
Caregiver Letter of Information & Consent	Families	2017/09/05
Instruments	Protocol to use with educators in monthly evening meetings.	2017/05/08
Instruments	Steps to conduct pedagogical documentation, including ethical considerations.	2017/05/08
Instruments	Steps of pedagogical documentation. Source: Understanding the British Columbia Early Learning Framework: From Theory to Practice (Government of British Columbia, 2015).	2017/05/08

The Western University Non-Medical Research Ethics Board (NMREB) has reviewed and approved the above named study, as of the NMREB Initial Approval Date noted above.

NMREB approval for this study remains valid until the NMREB Expiry Date noted above, conditional to timely submission and acceptance of NMREB Continuing Ethics Review.

The Western University NMREB operates in compliance with the Tri-Council Policy Statement Ethical Conduct for Research Involving Humans (TCPS2), the Ontario Personal Health Information Protection Act (PHIPA, 2004), and the applicable laws and regulations of Ontario.

Members of the NMREB who are named as Investigators in research studies do not participate in discussions related to, nor vote on such studies when they are presented to the REB.

The NMREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 00000941.

[Redacted Signature]

Ethics Officer, on behalf of Dr. Randal Graham, NMREB Chair or delegated board member

EO: Erika Basile __ Grace Kelly [Redacted] Nicola Morphet __ Karen Gopaul __ Patricia Sargeant __ Kelly Patterson __

Western University, Research, Support Services Bldg., Rm. 5150
London, ON, Canada N6G 1G9 t. 519.661.3036 f. 519.850.2466 www.uwo.ca/research/ethics

Appendix D. Continuing Ethics Approval



Date: 9 September 2019

To: Dr. Veronica Pacini-Ketchabaw

Project ID: 109337

Study Title: Climate Action Network: Exploring climate change pedagogies with children

Application Type: Continuing Ethics Review (CER) Form

Review Type: Delegated

Meeting Date: 04/Oct/2019

Date Approval Issued: 09/Sep/2019

REB Approval Expiry Date: 06/Sep/2020

Lapse in Approval: September 7, 2019 to September 9, 2019

Dear Dr. Veronica Pacini-Ketchabaw,

The Western University Non-Medical Research Ethics Board has reviewed this application. This study, including all currently approved documents, has been re-approved until the expiry date noted above.

REB members involved in the research project do not participate in the review, discussion or decision.

The Western University NMREB operates in compliance with the Tri-Council Policy Statement Ethical Conduct for Research Involving Humans (TCPS2), the Ontario Personal Health Information Protection Act (PHIPA, 2004), and the applicable laws and regulations of Ontario. Members of the NMREB who are named as Investigators in research studies do not participate in discussions related to, nor vote on such studies when they are presented to the REB. The NMREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 00000941.

Please do not hesitate to contact us if you have any questions.

Sincerely,

Daniel Wyzynski, Research Ethics Coordinator, on behalf of Prof. Randal Graham, NMREB Chair

Note: This correspondence includes an electronic signature (validation and approval via an online system that is compliant with all regulations).

Appendix E. Confidentiality Agreement

(To be signed by co-applicants, research assistants, and educators co-researchers)

1. Confidential Information

I understand confidential information will be made known to me for the study Climate Action Network: Exploring climate change pedagogies with children being conducted by Professor Pacini-Ketchabaw of the Faculty of Education, Western University.

Confidential information shall include all data, materials, photographs, video, and other information disclosed or submitted, orally, in writing, or by any other media, to _____ by _____.

2. Obligations of Co-Applicants/Collaborators/Research Assistants/Educators

A. _____ hereby agrees that the confidential '**Climate Action Network: Exploring climate change pedagogies with children**' research study and is to be used solely for the purposes of said study. Said confidential information should only be disclosed to employees of said research study with a specific need to know.

_____ hereby agrees not to disclose, publish or otherwise reveal any of the Confidential Information received from Dr. Pacini-Ketchabaw, research assistants or other participants of the project to any other party whatsoever except with the specific prior written authorization of Dr. Pacini-Ketchabaw.

B. Materials containing confidential information must be stored in a secure online location at Western University (and then deleted from computer) so as to avoid third persons unrelated to the project to access said materials. Confidential Information shall not be duplicated by _____ except for the purposes of this Agreement.

3. Completion of the Work

Upon the completion of the work and at the request of Dr. Pacini-Ketchabaw, _____ shall return all confidential information received in written or tangible form, including copies, or reproductions or other media containing such confidential information, within ten (10) days of such request.

At _____ option any copies of confidential documents or other media developed by _____ and remaining in her possession after the completion of her

work need to be destroyed so as to protect the confidentiality of said information.
_____ shall provide a written certificate to Owner regarding destruction within ten (10) days thereafter.

With his/her signature, _____ shall hereby adhere to the terms of this agreement.

Signature: _____

Date: _____

Name of Principal Investigator: _____ (please print)

Signature of Principal Investigator: _____

Date: _____

Appendix F. Curriculum Vitae

Sarah M. Hennessy

Education

Doctor of Philosophy in Education, Curriculum Studies, Western University **2018–2022**
Creative Common Worlding with Research Creation in Early Childhood Education

Staff and Educational Development Association (SEDA) professional standard in
higher education teaching, Level 1 & 2 **2017–2018**

M.A., Early Childhood Studies, Ryerson University **2017**

ECE Diploma, George Brown College **2008**

Bachelor of Arts, McGill University – Honours History **1991**

Relevant Work

Instructor, King’s College, Western University, Childhood and Youth Studies;
Course: Childhood in Culture, Society and Public Policy **Fall 2021**

Instructor, King’s College, Western University, Childhood and Youth Studies;
Course: Representations of Childhood **Winter 2022**

Instructor, Western University, Faculty of Education, Teacher Education Program;
Course: Curriculum, Pedagogy and Learning in Early Childhood **2021–22, 2020–21,**
2019–20

Graduate Teaching Assistant, Ryerson University, Early Childhood Studies;
Course: Consultation and Inclusion **2017**

Woodgreen Community Services, Toronto, ON
In-house educator responsible for annual and ongoing staff training and program
management for 80 RECE staff **2010–2016**

Research-based design of Early Learning Framework and User’s Guide for program
curriculum **2014–2016**

Full time registered early childhood educator at the Bruce Woodgreen Early Learning
Centre **2009–2016**

Suzhou International Early Learning Centre, Suzhou, China
Full time registered early childhood educator **2008–2009**

Publications

Hennesy, S., Agarwal, M., Coelho, C., & Bacelar de Castro, A. (in press). Pumpkin. In D. Conrad & S. Wiebe (Eds.), *Educational fabulations: Teaching and learning for a world yet to come*. Springer.

Bacelar de Castro, A., & **Hennesy, S.** (in press). Attuning to generative natures of discomfort: Early childhood education in the Anthropocene. In P. Kelly (Ed.), *Young people and thinking technologies in/for the Anthropocene*. Rowman & Littlefield.

Hennesy, S. (in press). Anecdotal edges: Propositions from sketching the walk as a posthumanist research method. In L. Lasczik, A. Cutter-Mackenzie, & D. Rousell (Eds.), *Walking as critical inquiry*. Springer.

Hennesy, S., & Rooney, T. (2021). Watching change: Attuning to the tempo of decay with pumpkin, weather, and young children. *Children's Geographies*, 1–14. <https://doi.org/10.1080/14733285.2021.2007217>

Bacelar de Castro, A., & **Hennesy, S.** (2020). Pedagogies of indeterminacy: Inquiring with charcoal and cardboard. *ECELink*. Common worlding in early childhood education special issue.

Pacini-Ketchabaw, V., & **Hennesy, S.** (2020). Childhood. In D. Cook (Ed.), *The SAGE encyclopedia of children and childhood studies*, 4 (pp. 298–305). SAGE.

Hennesy, S. (2020). Learning *with* Idea Station: What can children on one Canadian playground can teach us about climate change? In W. Leal Filho (Ed.), *Climate change management*. (pp. 201–217) Springer. https://doi.org/10.1007/978-3-030-32898-6_12

Hennesy, S., & Banks, M. (2018). Transcending borders in early childhood education and care. *ECELink*, Winter, p. 16–18.

Academic Presentations

Reconceptualizing Early Childhood Education, “Creating an Uncommon Field Guide”, Vancouver, BC **2022**

Assembling Common Worlds, “Writing PumpKIN”, a Children’s book, Nanaimo, BC **2022**

The Power of Play Conference, “Sound matters of play”, poster Birmingham, England **2021**

The IX Conference on Childhood Studies, Tampere, Finland, “Troubling time with fairies and pumpkins through the logics of decanting”, paper presentation **2021**

Robert MacMillan Symposium in Education, University of Western Ontario, “Critical engagement with Children's Literature: Creating a Primary Teacher Toolbox” **2021**

- Comparative and International Education Society**, Miami, Florida, “An UnCommon Field Guide: research-creation method with nature, children and educators in precarious times” **2020**
- Canadian Society for Study of Education**, London, Ontario, “Creating an UnCommon Field Guide: research-creation with nature, children and educators in precarious times” **2020**
- Young people, Well-being, resilience and enterprise: Critical perspectives for the Anthropocene**, Bilbao, Spain, “Common Worlds Citizenship: Encountering moments with materials” **2019**
- International Society for Teacher Education**, Global Conference, Niagara Falls, Canada “Idea Station: curricular considerations for Climate Change” **2019**
- International Symposium on Climate Change and the role of education**, Lincoln, UK “Learning *with* Idea Station: What can children on one Canadian playground can teach us about Climate Change?” **2019**
- EnviroCon**, University of Western Ontario, London, Canada “Charcoal and common worlds: what tracks can we leave as educators?” **2019**
- Robert MacMillan Symposium in Education**, University of Western Ontario, London, Canada “Storied Engagements with children and Photoshop - Inclusive approaches to identity” **2019**
- Robert MacMillan Symposium in Education**, University of Western Ontario, London, Canada “Multiliteracies for Inclusion: A lip-dub-flash mob portrayal” **2019**
- Arts for Education Conference**, University of Toronto, Ontario Institute for Studies in Education Toronto, Canada, “Storied Engagements with children and Photoshop” **2018**
- Global White Privilege Conference**, Ryerson University, Toronto, Canada, “Embracing the Land Acknowledgement in Early Childhood Practice” **2018**

Research Work

- PhD, Western University**, Faculty of Education, *Creative Common Worlding with Research Creation in Early Childhood Education* **2022**
- Research Assistant, BC Early Childhood Pedagogy Network** **current**
- Research Assistant**, Climate Action Network – exploring human-climate relations in early childhood studies (*A SSHRC Insight funded research project*), Veronica Pacini-Ketchabaw, Faculty of Education, University of Western Ontario **2018–2022**
- Research Assistant, Ontario Provincial Centre for Excellence in Early Years & Child Care**
a collaborative public forum for the advancement of early childhood pedagogies in Ontario to reimagine early childhood education as spaces for democratic possibilities. **2019–2020**

Research Assistant, *Communities left behind? A timely examination of school closure controversies for justice-informed decision-making on the fate of public schools in Ontario (SSHRC Insight research project)*, Bill Irwin, Huron University **2018–2021**

Research Assistant, *Harassment Study*, Ruth McKay, Carleton University **2020**

Research Assistant, *Building on assets: A netnography of a cross-border, online biliteracy curriculum*, SSHRC Zheng Zhang, Faculty of Education, University of Western Ontario **2019**

Honours & Awards

Nominee, **Award of Excellence, Ministry of Colleges and Universities** **2021**

Dr. Allen Pearson Graduate Award in Educational Leadership
University of Western Ontario **2018**

Yeates Graduate School Advisory Panel, Ryerson University
Personal invitation from Dean of Graduate School to represent Faculty of Community Services on panel and working group **2017–2018**

Usha George Student-in-Action Award
Award recipient for work with the Ryerson Student Childcare Advocacy Association **2016**

The Last Lecture
Finalist for Ryerson University speaker contest **2016**

Prime Minister’s Award for excellence in Early Childhood Education
Nomination and final round candidate for the National Award **2012**

Community Engagement & Membership

Vice President, Arts Researchers and Teachers Society (ARTS) is a special interest group (SIG) within the Canadian Association for Curriculum Studies (CACS), a constituent association of the Canadian Society for the Study of Education (CSSE). **2020–2022**

Reading Pedagogies of Equity, Social Action Research Project to support academic reading. **2022–2023**

Provoking Curriculum Conference Committee, Western University & Canadian Association of Curriculum Studies **2022–2023**

Pedagogist Network of Ontario, Education-based researcher organization to create the processes and pedagogical trajectories necessary to become a pedagogist in Ontario **2020–2022**

Symposium Committee member, Interdisciplinary Centre for Studies of Curriculum as a Social Practice, Curriculum and Pedagogy for Uncertain Futures Symposium **2021**

Anti-Racism Planning Committee co-chair, Faculty of Education, Western University **2020–21**

The Curriculum Journal, reviewer 2021–2022

Faculty of Education Library Committee member, Western University 2020–2021

CAN Climate Action Network’s International, Interdisciplinary Colloquium,
Organizing Committee member, Climate Pedagogies Responding to ecological
challenges with/in contemporary childhoods 2019–2020

Exhibit Coordinator, Dis/orientating the early childhood sensorium: Micro-stutters for
alternative climate futures, London Children’s Museum 2020

Colloquium Session Co-Chair with Mindy Blaise, In troubled dialogue with pasts,
presents, and futures in Responding to ecological challenges with/in contemporary
childhoods” 2020

Graduate Student Mentorship Coordinator 2019–2020


Education Graduate Student Association member, Western University 2019–2020

Society of Graduate Students member, Western University 2019–2021

Guest Lecturer, Fanshawe College, Early Childhood Diploma program “Identity and
Curriculum with Young children” 2018, 2019

Project designer, M.A. Boot Camp - Early Childhood Studies M.A. program, Ryerson
University, Conceptualized, researched and designed pilot program 2017

College of Early Childhood Educators, Registered Member in good standing
2007–2017




An Uncommon Field Guide

An Invitation to
Becoming with Place

By Sarah Hennessy

© 2022



An Introduction

Grape vines and shadows, 2021

What is a field guide?

A field guide is a way of learning about a place, a species, or an ecosystem. The traditional common field guide is an illustrated identification manual. Field guides often favour hand-drawn, painted, or sketched renderings accompanied by systematic, scientifically based classification of biological traditions of taxonomy (Schaffer & Young, 2015). Physically compact, field guides are designed to be carried into the field for active identification use. They are often organized by ordered categories to identify and distinguish genus, species, and subspecies in a geographically defined area (Law & Lynch, 1988). An additional element of a field guide is the conceptual design for a specific end-user, the amateur, as they are positioned for use in the real world within nature, not as comprehensive compendiums for laboratory reference.

Visual rendering of the natural world in field guide traditions has included the works of Aristotle and Virgil through to European-led colonization practices that drove the work of Lewis and Clark, John James Audubon, and Charles Darwin (Philippon, 2004). Many of the early field guides were scientifically based, government-led initiatives of cataloguing and inventorying human dominion over the natural world (Scheese, 1996). Field guides also have a long history tied to pastoral approaches to nature that work to further separate humans from natures (Scheese, 1996). This tendency to imagine a pristine wilderness acts to romanticize nature as singular and other, perpetuating and supporting human beliefs of superiority and separation from the natural world.

Why uncommon the field guide?

The traditional ways of knowing place, through scientific taxonomy practices associated with colonialism and resource inventorying habits of consumerism, have contributed to our global climate crisis. Our ways of knowing place are not working. To uncommon the field guide is a deliberately disruptive attempt to understand place differently. If, by disrupting how we understand ourselves and our role in place, we modify our behaviours and change our habits, then perhaps we can live differently and contribute differently to the planet's climate.

Creating the uncommon field guide

An Uncommon Field Guide grew from my doctoral thinking about climate change and early childhood education. As part of child care practice in Canada, educators often go on neighbourhood walks with children. As part of these walks, we notice. We discuss what we notice. What we choose to notice and discuss is a learned behaviour.

We might or might not notice and discuss, for example, a drain cover, a dead grasshopper, a cigarette butt. These constructed, gross, and toxic things are part of this place. Place can be pretty, but it can also be ugly, complicated, political, and confusing.



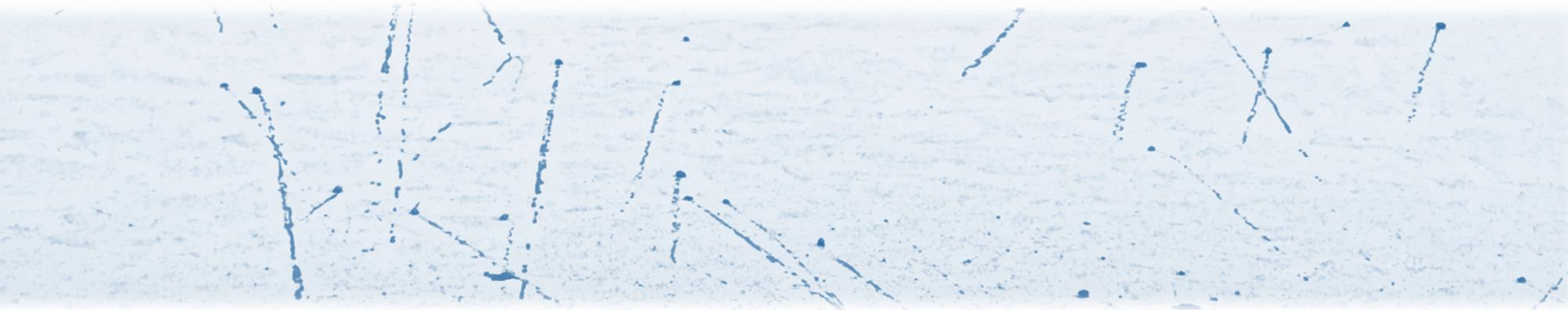
Colour experiment 16, 2020

Perhaps if the guides we create with children focus on the layered realities of shared place, we can interrupt human habits that separate us from nature. So far, human approaches to climate change that position us as separate and superior to nature don't seem to be working. Focusing practice on thinking *with* nature in early childhood education considers new ways to be with the planet in light of climate change. In my doctoral research I ask, "What could thinking differently in early childhood education look like when we decentre humans in the more-than-human worlds we participate in every day?" An Uncommon Field Guide is a way to consider this question.

The guide's purpose is to ask questions and try to understand differently. It is a move away from thinking towards *an* answer, thinking instead towards other possibilities. This change in thinking can be uncomfortable, because we (supposedly enlightened humans) have hard-wired ourselves to quantifiable behaviours of seeking provable facts. The discomfort of the uncommon field guide happens because it provides no answers, just more questions. In Western cultures, scientific expertise informs us. In uncommoning, more-than-human cohabitants, children, and educators are the guides.

The field guide's unconventional format is both complicated and simple. Simply, its entries begin to describe a specific place formed from a relationship with this place. It is also a tangled mess of concepts, questions, and observations that disrupt historic, romantic, and scientific notions of a common field guide. In its complicated form, it can be uncomfortable as it unpacks the layers beyond familiar. Its purpose is to engage with place and all the complicated histories, politics, and discomfort that exist when a human-centred world defines place. Restorying place, as this guide does, foregrounds different ways of sharing space.

Each entry of this uncommon field guide is based on field research with children and early childhood educators. Along with field notes, each entry includes child and educator comments and questions, original art, photos, and text. These elements, in combination, afford other ways of seeing, thinking, being and becoming.



Pebble skid marks, 2020

The entries were generated from collaborations with place, children, educators, neighbours and the chance of weather, route, seasons and more. Each entry comes from interactions that resonate with place. When place is a common denominator, imagining the goings-on of a fish-shaped drain, for example, can inform how we know a place.

Art knowing

Creative, visual and textual expressions is a part of my way of knowing and learning, including the methodology of my dissertation. Thus, the entries in the Uncommon Field Guide are balanced between words and images as a way of recognizing different ways of knowing in a world dominated by the written word. In some cases (sonic pebbles and fish drain) QR codes invite viewers to witness the original experience through visual and auditory technology.

The visuals in the Uncommon Field Guide are conceptualized as the process, questions, and multifaceted engagements with place-generated ideas. For example, the photo of the grapevine entwining the surveyor's tape is at once a question, part of the process of following lines, and a visual engagement. Similarly, the layered buckthorn and aerial photo act together as part of a process of considering shadow places and human expansionist tendencies. The uncommon visuals are not designed for user identification as they would be in a traditional field guide. The visuals are creative expressions of place relations.



PLACE RELATIONS

For this uncommon field guide the focus is on creating an intimate relationship with real experiences with a place. Through the child/educator/researcher process we are becoming with this place: Our relations with this place have changed us. Understanding and thinking with place, for humans, is an intimate, layered process that blends culture, education, politics, and habits. This is only one way of conceptualizing place. Place is shared and has geologic histories beyond the human experience. Place is shared with a multitude of others experiencing the same place differently. Place can be simple: It can be a physical and sensorial reality where one is located. The gross, awkward, constructed, and toxic nature of some entries crushes any attempt to romanticize this place. In this guide, place relations go beyond simplified ways and engage with the complicated and confusing because this is a very complicated place.

The invitation

The idea of the invitation comes from my ethical approach trying to focus on my role as a guest. It is an effort to diminish ego, presumption, and superiority. The invitation may also come from the children and early childhood educators who invited me into their lives for my research. It may have come from the place. Invitations are extended to others. In this case, as an academic, I am the other. I accepted the invitation. In many cultures, customs dictate expectations for invitations. The process of creating the Uncommon Field Guide has meant co-creating expectations for becoming with a shared place. One of the co-created expectations with this invitation is the rejection of human creations like the superiority of science (scientism) or adults (childism) as ways of knowing. Accepting this invitation demands an ethical attention to complex relations with many, at once. As you read this guide, I invite you to join me to become with this process. Understanding this as an invitation is also a humble, local response to a global problem of climate change.



How to use this guide

Because this is not a linear engagement the guide contains no page numbers. Join the thinking where and how you want to. Read it, touch it, dance with the sonic pebbles, paint with the fish drain, draw, photograph, sing from its inspiration, or carry it as conversation into a way of becoming with the world. Let it be a starting point rather than a completed, static idea.

The practice of pairing the visual and written is a tradition with field guides. With An Uncommon Field Guide, each creative work is a stand-alone part of the research process generating new concepts that, in partnership, complexify each entry. The last entry is a reflection on the creative process of this guide and my creation of a palette of place—inks created from and with this place. How does this place communicate through and with colour? What do your relations with place inspire artistically?

Find magical provocations with the guide's stories, questions, and moments. Be willing to take on the big, difficult ideas. The following is a caution I repeat to myself as an educator and a caring being:

DON'T GET COMFORTABLE IN SEEING AND EXPERIENCING ANYTHING, ANYONE, OR ANYWHERE IF IT LEAVES THE FOCUS ON YOU. BE WILLING TO ENGAGE WITH OTHER PERSPECTIVES, ESPECIALLY THOSE THAT CONFLICT WITH YOUR EXPERIENCE.

This guide is designed to purposefully bring some discomfort into the uncommoning process. Climate change is daunting and the intimacy of a local shared place allows relations with others to ground thinking. Consider how to coexist differently. I invite you to exist with a lens of uncommon field guide creation. I am.

Sarah



EUROPEAN BUCKTHORN

In the place currently called Canada, European buckthorn is labelled an invasive species. Introduced by English and French settlers in the 1800s, buckthorn is a berry, a bush, and a consequence of certain behaviours. Buckthorn is a political plant that carries conversations, relationships, histories, and discomfort.

As a plant, buckthorn can grow up to six metres high and produce an abundance of juicy, dark berries. Its jagged-edged leaves and branches that end in thorns make it easy to identify. Chosen by farmers in Europe to divide properties and separate farm fields, it became a settler plant of colonization.

Identification of this mammoth plant on a walk with children and educators began with berry rain, stained hands, and complicated conversations. After stopping and witnessing berries fall to the ground, a child said, "like rain." This observation prompted spontaneous shaking of the branch to create berry rain. From there began the collection of fistfuls of berries and questions about bird food and the staining consequence of squeezing berries. An educator identified the plant as buckthorn and continued by naming it as an invasive species, a term for species that are not native or indigenous to the place: They are nonhuman settlers introduced post-contact. In the case of buckthorn, after introduction in Canada it spread rapidly, often overwhelming local plants and changing animal diets.

After our initial encounter with buckthorn, it walked with us. It stayed on our hands and clothes as stains and as topics in conversation. We continued with buckthorn discussing invasive species, colonization, and consequences, which opened a deluge of problems, questions, and possible answers about the complex meanings of invasive. Dominating native species, European buckthorn was labelled a noxious weed (Province of Ontario, 2012) because of its negative impact on agriculture.

What happens when you can't get rid of the stain? Stains, like scars, are reminders.



Buckthorn, pen, pencil sketch, 2020

Buckthorn and *Buckthorn Deconstructed* are two approaches to visualizing the plant. As a sketch the lines lead to words and connect to thoughts. As a collage with buckthorn and wild grape generated inks, *Buckthorn Deconstructed* is a reincarnation of plants where staining powers become part of the story of place.

Buckthorn becomes an example of Instone's (2015) respectful wayfinding as taking the "less-worn and unknown paths and forging new connections" (p. 181). Leaving the predictability of the sidewalk for the entangled, dense boundary of a forest is mysterious and unsettling. There is no longer a way; instead there are multiple possible ways into the unfamiliar. From berry rain comes invasion and colonialism as we forge new connections.

Buckthorn deconstructed, ink cut-out collage, 2020

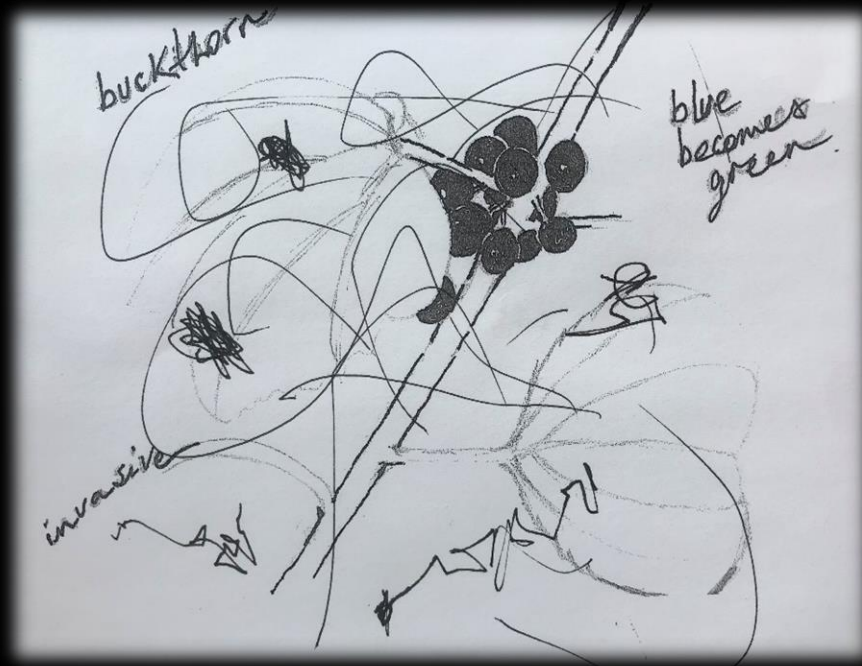
Nairn and Kraftl (2016) suggest that “places gain meaning—through human action, through dwelling, through emotional attachments, through events, and through memories attached to them” (p. 5). Buckthorn foregrounds human behaviours and the resulting consequences.

Invasive

In moving past a simplified binary of invasive as bad, indigenous as good, we embrace the complexity of thinking with the enemy release hypothesis (ERH), where introduced plants spread rapidly and invade because they have been liberated from their coevolved natural enemies (Liu & Stiling, 2006). With ERH a deeper, contextualized understanding frames a relational understanding of buckthorn as finding respite in its new ecology: In southwestern Ontario buckthorn can thrive because it is no longer being dominated in the agricultural context of Europe.

We live with buckthorn.

Humans and buckthorns can both thrive.



Buckthorn regenerated, pen, pencil sketch, 2020

BUCKTHORN STORY *INTERRUPTED*

The buckthorn conversations became collective educator/child/researcher memories of more-than-human common worlds, where stories are regenerated differently as a form of ethical practice. In troubling buckthorn, its invasive and colonial heritage, we can interrupt stories, name consequences, and consider alternative behaviours.

I photocopied my original field sketch, *Buckthorn*, and invited children to renew the sketch as we revisited our stories and memories. As we layered regenerated stories, walks, memories, and conversations, these marks became a practice and product of relationship building with buckthorn. As Leanne Betasamosake Simpson (2017) explains, wisdom, which is built from the ground up in Nishnaabeg epistemology, is continually regenerated through the relationality of the person and their community. How then are these new layers of stories and new marks on sketches acting to interrupt familiar voices of colonialism with invasive species?



Image imagining

Layering is part of the thinking process. The aerial images, shared by a parent, contribute a different perspective of place. How we experience place is layered, bringing a compilation of perspectives. Layering the texture of leaves, branches, and berries with built community can be a visual suggestion of a problematic human lens of superiority. There are layers to the buckthorn image—layers that attune to its relations with this specific place at this specific time. Layers are continuously building, including the recent addition of buckthorn conversations as experience and art (*Buckthorn Deconstructed*, *Buckthorn Regenerated*, and *Uncommon Buckthorn*).

Through raining, staining experiences, colour informs our dynamics together, transferring and joining. The bright green of the leaves in the image is ink created from the deep purple berries. Through the alchemy of lye, dark purple berry juice, oxygen, and water comes vibrant green. The darker green leaves come from the confluence of buckthorn green with black walnut brown. The purple berries are rendered from the neighbouring wild fox grapes.

Ink-soaked pages are cut to form the shapes of the stem, leaf, and berry parts of the buckthorn and assembled on black paper. The final layer added is a transparency of the aerial photograph of the community. The texture of buckthorn leaves become the ever-expanding subdivisions and paved roads that decrease the farmland and woodland to renovate place to suit changing human needs.



Fish Drain



Still image from video, 2019

It's still cold, but cabin fever is setting in. We are able to bundle three children in warm winter wear, barely leaving eyes exposed as we brave a stroller walk around the parking lot. The arctic temperatures dictate our destination and we choose a stroller walk instead of the playground as the children are immobilized with all the clothing. On the walk, a child exclaims, "Fish, fish!" Perplexed, we look around at what could prompt this verbal exclamation. The child is 15 months old and building vocabulary as they prepare to move from the infant room to the toddler room.

At the edge of the pavement lies the cause for "fish, fish"—a fish-shaped drain cover. We stop and help the children sit on the curb. We listen and look at the drain. It is loud. We peer down, looking and listening. Where is it going? What is down there? What is happening? Are there fish? Where does the ladder go?

We film an 11-second video before gathering the children and returning to the warmth. That day we watch the 11-second video 17 times. We draw fish, splash water, and retell the fish-drain-water-walk story.

Field notes, 2020



Scan the QR code to see and hear the fish drain.

...disappointed

neglect...

What do drain habits do?

Drains are entry points that take away what we are done with. They put out of sight what we do not want to see. Drains are a meeting place. At this particular drain, water, leaves, garbage, bacteria, the living and the dead congregate and move through the grate before dis(appear)ing below. For brief moments we see this convergence. We hear the echoing, liquid movements. We catch whiffs of activity from below. Drains produce complex sensory prompts.

Drains have a long partnership with human settlement health habits. Our species' collective need to live together works, in part, because we are able to source fresh water and expel excess and contaminated water. From Hades, Persephone, and the River Styx to the engineering feats of ancient Rome, drains have carried complex human histories.

...Inhabited, Dirty, *Hades*, Undercommons,
WASTE, *Water*, Effluents, Hidden,
Buried, Decay, HELL, *Elf* languages, *Fatbergs*...

Shadow places

Drains are more-than-human worlds where humans meet with nonhumans below the surface. Humans are very present below the surface in the form of biological waste, cigarette butts, garbage, and toxic chemical creations. In many cultures, below the surface is where we put our dead.

We live with real underworlds.

We create them. We ignore them.

What flows below is messy and real. It is also not innocent. If we ignore, pass by, or dismiss the drain as a shadow place are we contributing to what Val Plumwood (2008) refers to as a “false consciousness of place” (p. 139)? What are the consequences of this behaviour? A walk around a parking lot on a frigid winter day is a reminder that we create and live with drains. With a drain it is possible to think with young children and the realities of place.

With the sounds, smells, and sights from the 11-second video it is our senses that foreground the parking lot drain.

What happens when we dismiss these parts of us that flow below?



How can you think with a drain?

The drain was designed to remind us that
we exist with, not above,
the storm water runoff that flows.

We kneel on the classroom floor to listen and watch the video on the phone. We watch again. We carry the phone to those who have not seen it. We watch again.

We watch the tap and sink drain as we wash our hands.

We move our hands through water.

The fish drain continues to command attention.

Because we are unable to see into the drain, the hidden world below intrigues us.

Children pick up the phone to see what is under the video.

Hidden is a subjective term. We want to go below and see this out-of-sight world. These waterways afford a certain life. We hide these worlds from ourselves. We prefer to keep the unpalatable at bay. Drain questions and conversations around an 11-second video viewed 17 times is a relationship. It is a way to build common world curriculum.

In foregrounding the parking lot drain, we value children's observations as part of eco-conscious education that confronts, problematizes, and narrates the real. This drain and its contents are neighbours. Wondering where it goes invites us to know it better.





Grapevine Entwine

Grapevines carry a quirky whimsy of curlicues and spring-like shapes attached to others—other stems, other plants, other vines, and found objects in their sphere. They grow in canopied masses, twisting and insinuating themselves with neighbours.

Sitting in the forest with infants often means staying in an intimate environment limited by how far a child can crawl in a snowsuit. The result generates a kind of nested habit with place (Kohn, 2013). These relations, within relations, layered together with chance, climate, and purpose, become familiar places—a multispecies shared nest tethering neighbours to place.

The small clearing in the forest we visited regularly included a mingling of perambulating grapevines and crawling children. As we followed the grapevines with our eyes, then fingers, our curiosity moved us to follow their lines as movements (Ingold, 2015). As winter became spring, we considered grapevines again and followed the questions. What grapevines do with curls takes imaginations in quirky directions.



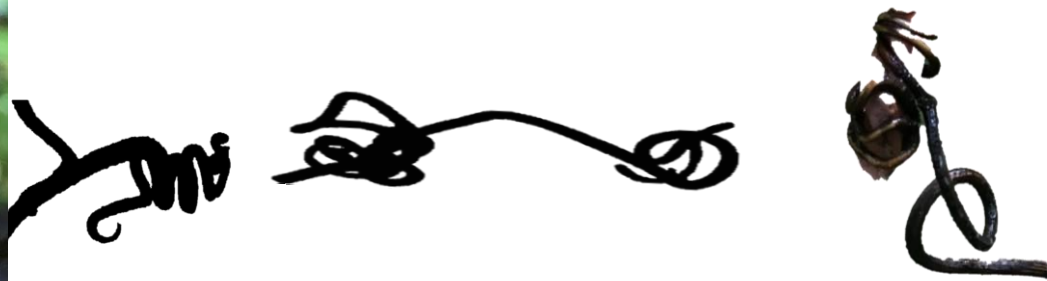


How did this happen?

The physicality of following up, down, over, and around generates many raised eyebrows and inquiring murmurs.

As we grapevined along, a child indicated a neon pink ribbon where a vine had entwined itself with a piece of surveyor's tape in midair. Surveyor's tape, also known as flagging tape, is used for a variety of purposes, including landscaping, forestry, surveying, navigation, and recreation. The brightly coloured, nonadhesive tape can be used to mark trees for various reasons—they may be dangerous, unhealthy, invasive, have saplings in need of protection, or be slated for removal. The tape is often used as a messaging system between human foresters and maintenance and building crews, purposefully tied to trees and other surfaces to indicate a route, work, or warning.

In this image it is the vine that has tied itself to the surveyor's tape. Is there a message in this entwining act? Instead of anthropomorphizing the vine, we speculate with it and the concept of asemic writing, a kind of text without semantic meaning.



Entwined, 2019

Is finding meaning missing the point?

Actively entwining ourselves into this forest nest becomes a chance to “pause and contemplate the significance of meaninglessness as a meaningful pursuit” (Alsobrook, 2017, p. 5).

With no meaning, the emotions and aesthetics of grapevines can feel like an invitation to speculate.

Part of the process of following vine lines in the forest, with children, is settling into the discomfort of not-knowing. Not-knowing is a generative space in which to accept the invitation to speculate.



Communication?, 2021

In following vine lines, we consider the removal of semantic meaning. The absence of semantics is uncomfortable. If there is no meaning then what does it mean? Is finding the meaning missing the point?

Irony aside, of a grapevine tying itself to tape that could seal its fate, asemic writing affords permission to wonder, with the comfort of knowing there is no meaning. Not knowing can bring the whimsy of *up, over, around, through, attach, twirl, cling, release* as a way to think. It is an abstractly beautiful way to combine the not so disparate.

The whimsy and curls of grapevines are reminiscent of cursive writing. The shapeliness and flow of cursive writing connects to asemic writing. As artist Mary Jo Hoffman (2020) writes, asemic writing is a

tug of war between order and randomness. Too much order and it is simply an alphabet, or writing in a known language. Too much randomness and it is abstract design.

Following lines



If you know there is no meaning then vine lines are...
unanswerable questions,
emotional invitations to connect differently with surveyor's tape,
tangible and intangible movements of nested neighbours,
powerful whimsy, and...

How do grapevines entwine with surveyor's tape? How did this happen? How did the vine meet the tape? Dangling from trees, at the whim of wind? We wondered how long it would take the vine to wrap itself so intently around the tape. Vines spread; they give in to wind, weight, gravity, and chance in an effort to grow, access nutrients, and extend their tendrils. In an imbricated world, their actions, like those of any species, have consequences.

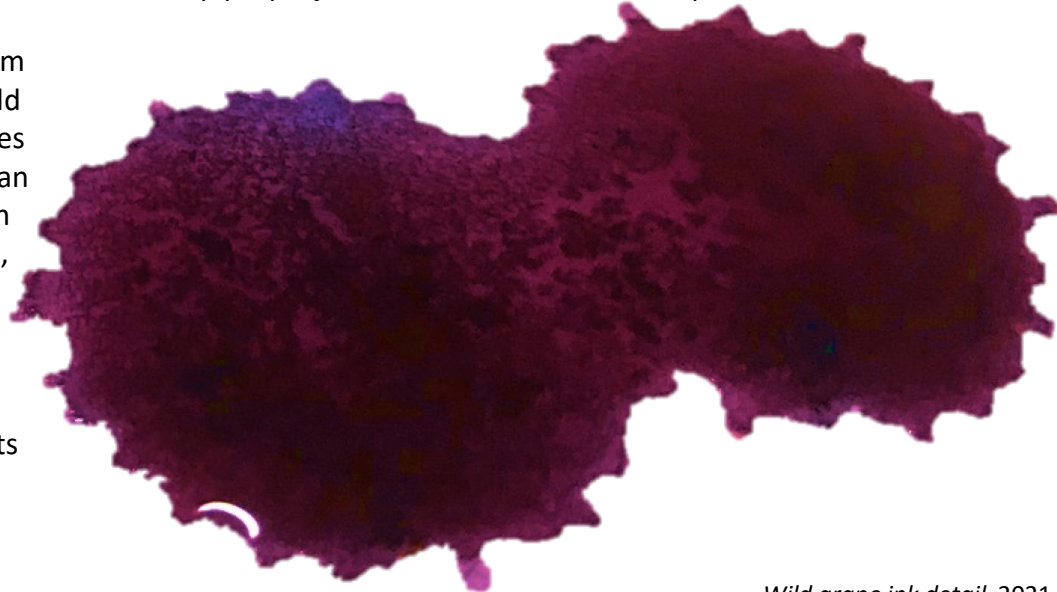
A grapevine is an elevator, a tripping hazard, a source of nutrients, a defense system, a network, and a messaging system. It is deeply connected to a myriad of others. With its aseptic, meaningless shapes, grapevines make humans feel left out and othered, cast out of what may or may not be a story (Alsobrook, 2017).

What happens when people or things cling to one another? There is an entwining of lines. They must bind in some such way that the tension that would tear them apart actually holds them fast.

(Ingold, 2015, p. 3)

Following vine lines, with eyes and fingertips, became tracing shapes of tree bark and indented lines on sidewalk squares. In the discomfort and freedom of following lines, communication in the shared forest nest can change. In the same moment we can understand where the vine is going but not understand how it got there. The following with eyes, fingers, words simultaneously builds humility and contemplation.

The juicy fruit at the end of weighted vines feed a multitude. Their deep purple juice stains new lines on this place.





Husk hardball, 2020

*What is it?
Why is it looking at me?
That pig nose is scary.*

Field notes, 2018

Black Walnut

Black walnut is a native species of tree with complex attributes. Black walnuts participate extensively in forest worlds. As a biochemical influencer they release juglone to limit the abilities of other species to grow or reproduce, thereby securing a competitive edge in a forest. Their seeds provide a nutritious nut to many species. Like maples, black walnuts' sap can be made into a tasty syrup. The colour, strength, and durability of the wood make it a desirable and useful building material. Ink made from the fleshy husks of nutshells produces a rich brown colour. Black walnut trees can emit a spicy, peppery smell. They are hearty trees that grow as high as 40 metres.

Dark Influencer

Juglone, the chemical produced by black walnut trees, can cause injury and death to some plants. In decimating some neighbouring species a black walnut tree can then secure water and sun for itself. To some, the juglone influence amounts to a dark side of the tree (Feeley, 2005). The quality of being a dominant influencer with the ability to extinguish competitors and take what it needs could describe both a black walnut tree and, conceivably, some humans.

The rich brown ink made from the inner husk of the fruit entices wonder about dark, rotting goings on. Layers of brown ink on paper invite imagination regarding what is and is not seen.



Black walnut, 2019

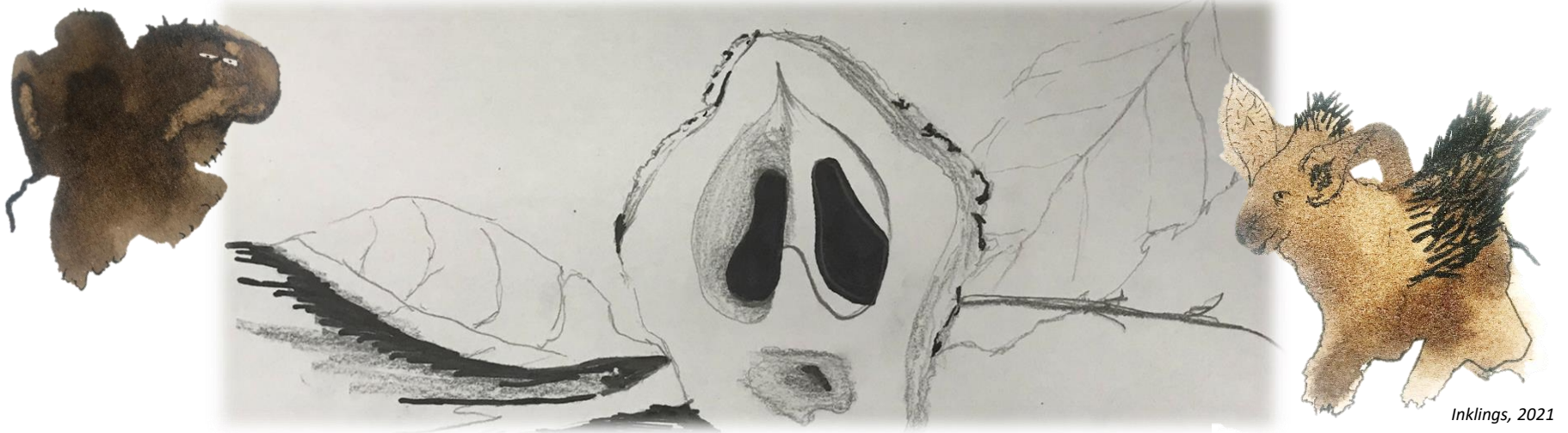
I wonder becomes speculation, fabulation, and more

A gentle leap from considering what is not seen to what could be is speculation at work. In that one little leap, we can imagine other configurations of knowledge making.

Being lured (Whitehead, 1978) to consider the layers of ink and eyeless gazes starts with imaginative *what ifs* that can present opportunities to consider more political *what ifs* in human shared worlds. Following *what ifs* is awkward under the weight of a reality. Becoming unbounded by the weight can become an invitation to think of shared worlds.

HAUNTING

As ground dwellers, humans exist in a limited walnut world of trunk, bark, surface roots, and nut-strewn ground. We hear the thump of nuts landings. We see the resident rodent populations discard the remnant shells left after eating the protein-vitamin-mineral-rich nuts. From tree fruit to rodent food, the now scary pig-nose remnant nutshells repeatedly caught the children's eyes on walks. This reincarnated form of fruit, then food, haunts us.



Ghost, acorn?, 2018

Inklings, 2021

The shells' dark hollows invite questions and speculation. As Robin Wall Kimmerer (2021) considers "what does the earth ask of us?" our speculation moves around "what the walnut might ask of us." The walnut's haunting nature is so captivating that everything around it seems to disappear. It is as if the soil, twigs, leaves, and insects nesting with the walnut shell disappear with the discomfort from this imagined stare. As a ghost pig nose, this phantom shape opens a possibility of ghosts among us. Even without eyes, its gaze captivates us.



Inklings, 2021

Why speculate?

Speculating and imagining otherwise is a way to world: It “disrupts habitual ways of knowing” (Truman, 2018). Speculating, and speculative fabulations, in particular, builds on everyday storytelling practices with the potential to unthink *me*-practices that centre individuals and humans. The make-up stories of childhood are at home in this speculative place.

Imagining other worlds and their inhabitants forces us to unlearn. Ideating on pig noses and fear in combination with black walnut ink conjures others to join the scary snout. In the process, we suspend what we know about animals to reconfigure knowledge otherwise.





Black walnut ink stains become speculative others.

It's staring at us.

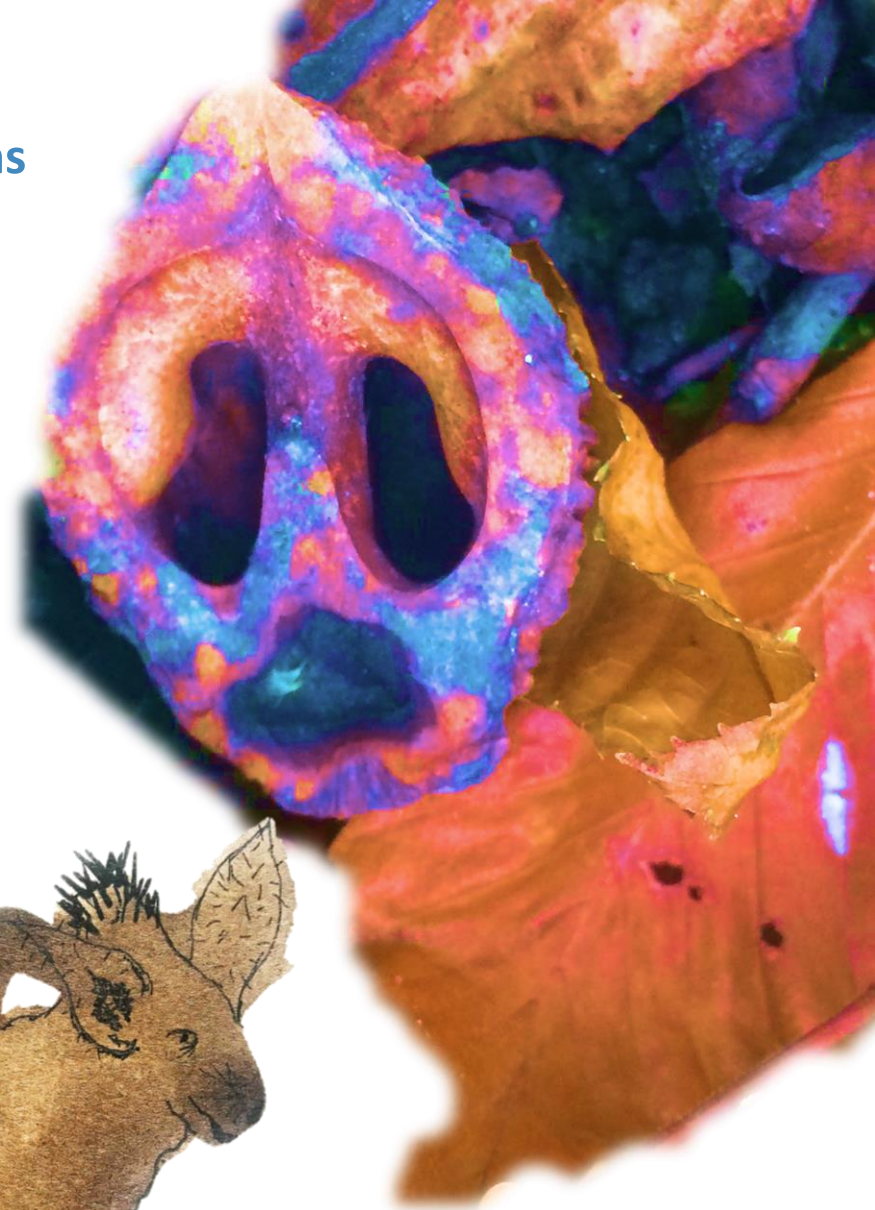
The dark gaze, a surveyor of the forest floor, generates new forest members...Inklings.


Noses that can't smell and eyes that can't see beckon other ways to know.



Imagining what others the ink emits with us lets black walnut, as a dark influencer, inform our imaginations in new ways.

Inklings are fictional creatures realized from blobs of ink.





What is a neighbour? How can we be a different kind of neighbour with more-than-humans? How can we think about neighbours beyond fences, divisions, privacy, and property to care about shared spaces?

toxic neighbours

In a parade of triple strollers, we slowly made our way towards a favourite place: the pond—a relocated pond, moved to accommodate a housing development.

Child and educator voices intermittently announced familiar and new points of interest as we moved along the path.



Walks with young children include a myriad of inanimate, animate, dead, decomposing, pretty, weird, ugly, visible and invisible neighbours in a variety of shapes and sizes. These walks help us recognize that most neighbours are not human.

We looked for the dead grasshoppers from yesterday.

gone

Noting their disappearance and questioning whether they were someone's breakfast, a child pointed to the thin ice forming on an early frost puddle, exclaiming, "Bubble!" As we watched the trapped bubble move under the ice surface, an educator said, "Just look at the power of that," pointing to a small thistle growing up through the asphalt path.

Thistle started a discussion on power, resilience, and thriving, which dispersed and pollinated a dialogue on professional recognition. As early childhood educators in an increasingly policy-laden, political system, educators identified with the thistle, facing the weight and dominance of asphalt on them. The metaphor extended to children living in adult worlds, regularly referenced as resilient.





Meaningful metaphors

What if we conceptualize early childhood education as a space to consider, with children, how authority is not above but within (Massey, 2005)?

What could we learn from the authority of a thistle or cigarette butt? Cigarette butts and asphalt remind us of the dominant forces that can unnecessarily bind educators and children into a system of regulations that results in scheduled days of mandated sanitized routines.

Instead of cropping images to edit out cigarette butts and dead insects, we can build a broader neighbour curriculum with them. Butt, thistle, dead grasshopper, asphalt, children, educators are cohabitants in this common world.

What if early childhood became a place to learn to find authority within? What if that authority was a common-world, cohabitant-informed authority? What if educators' complex political discussions were positioned as valuable in the process of children learning to share space and be neighbours? If authority comes from within not above and we, as humans, are not above but within nature, how can we expand our definition of neighbour?

The dead grasshopper and cigarette butt are neighbours.

Toxic neighbours, 2019





Toxic neighbours, 2019

What happens when we label something a weed?
What changes when thistle is neighbour?

As “street flowers,” thistles “occupy an urban landscape that is very hostile, and they have to be adaptable and find little bits of soil to prosper” (Richardson, 2014). They are of this place and this time living complicated lives with toxic asphalt and cigarette neighbours. Documenting a thistle with a purple bloom in grass conveys a different understanding of this place and time. It tells a different story, sparks different conversations and invites other questions.

Words matter

Language, a complicated and powerful process, can be an opportunity to think carefully about the words we use. It can also perpetuate wrongs. The thistle, capable of breaking through asphalt, is a strong plant yet is relegated to the category of weed. What are the othering consequences of labelling some plants as weeds? Dandelions, the consummate symbol of the weed world, are a rich and delicious source of nutrients, yet instead of being harvested as food they fuel a multimillion-dollar industry of lawn care pesticides.

While watering, fertilizing, and tending to some plants we model exclusionary behaviours toward other plants. The preferential treatment of some pretty plants and exclusion of those deemed lesser condones a model of exclusion and privilege, othering some based on human power and control. Dandelions are neighbours.

Terminology teaches

How would we treat garbage if we understood it as neighbour?



Thistle flower, bee butt, 2020



VigNots: The problem with pretty

Artist and educator Towani Duchscher (2021, April 15) suggests, “in making it pretty, we can lose the lesson.” Those cigarette butts, asphalt, and dead grasshoppers convey a complex interconnectedness where understanding moves past beauty, novelty, and the ability to amaze the human.

A vignette is a traditional term used for visual, sometimes literary, sketches that connote pleasing views that invite viewers into narratives. A more inclusive neighbour lens converts a representative hallmark of Euro-Western literary traditions into a vigNot. A vigNot is an alternative, political, possibly disturbing invitation to think and perceive otherwise. The thistle, asphalt, cigarette butt, child, educator, dead grasshopper, puddle moment is a vigNot—a non-romanticized snapshot of the place where othering practices like labelling plants “weeds” becomes an invitation to rethink neighbours.

Recognizing, foregrounding, and valuing messy, dirty, uncomfortable realities of vigNots can allow plants designated as weeds and street flowers to become neighbours. VigNots open curriculum and early childhood education to Alexis Shotwell’s (2016) work on the problems with purity. VigNots keep the asphalt and butts in the photo as real reflections of knowing this place at this time.



Sidewalk storyboards

There is a whole world of stories in sidewalks.

All six children are buckled into the strollers for the return from the forest to the early learning centre. As we stop at the corner, waiting to cross, a child points to the ground and says, “leaf, leaf.” I look down to see the impression of a leaf permanently imprinted in the concrete of the sidewalk.

Field notes, 2018

Symbolically, this leaf is a sign of the permanence of our human footprint. The concrete traps images of nature in the humanscape of a sidewalk. This marking of nature is enmeshed with ways of sharing space.

With that child’s “leaf, leaf” the poured aggregate concrete of the sidewalk becomes a storyboard as words, images, and symbols bring trees, birds, wind, and shapes together with imaginations and conversations.

Who did this leaf belong to?

WHAT IS ITS STORY?

Leaf, leaf, 2019





Leaf remnant, 2019

Storytelling on/with the land

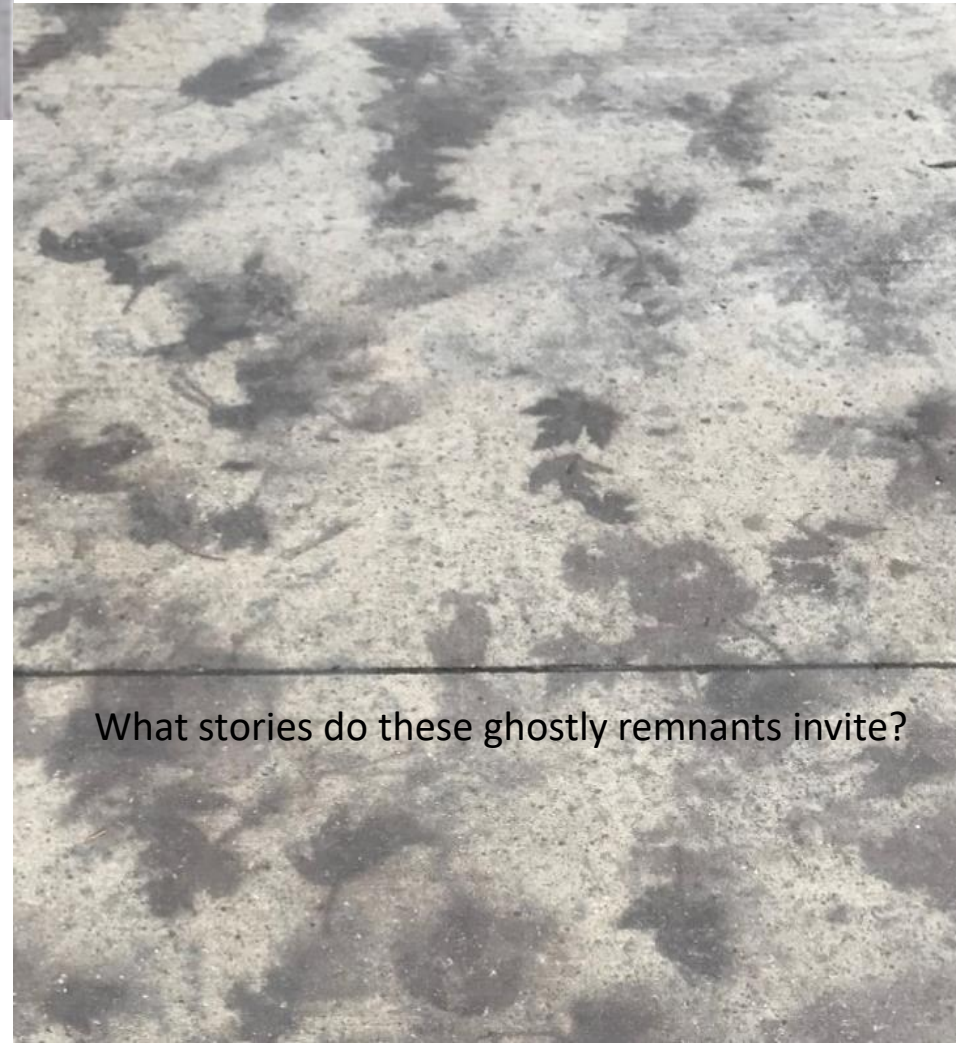
Yup'ik Elder Annie Blue (2010) practiced a tradition of storyknifing, a literary form that combines oral storytelling with corresponding, quickly drawn illustrations representing scenes. The knifing part comes from the tradition of using a knife to etch drawings into mud, then smoothing over the mud after each drawing to make way for the next rendering. Storyknifers use symbols to represent landscape features, characters, and individuals.

In Blue's (2010) *The Raven Story and the Boulders: Akagyugnarli*, the storyknifing invites storyteller and listener imagination and place knowledge to be active participants in the tradition. The knife markings with oral storytelling become physically embodied directly with Elder and place, mingling mud, knife, and story with traditions, bodies, and places. With storyknifing, place, place-knowledge, and traditions are age-old stories enacted.

We place concrete sidewalks. Leaves enliven them with imprints of their next chapters.

Leaf spirits, 2019

Finding imprints from various leaves and tracks becomes a form of uncommon storyboard. "Leaf, leaf" exclamations lead to observation of area trees and questions about leaves, prints, sidewalks, and more. A few weeks later, "leaf, leaf" is again exclaimed as we walk past the stained sidewalks with traces of leaves that are no longer leaves but ghostly remnants.



What stories do these ghostly remnants invite?

The common, cement sidewalk has stories to tell.

Concrete, a mix of sand, cement, stone, and water, is the most common construction material on the planet. The cement portion, composed of sand, clay, limestone, and shale, makes these geologic materials a fitting storyboard for a common world of interconnectedness.

“When extracted and pulverized to produce concrete, rock strata are reduced to dizzying gibberish—which become mute blocks of story-less geologic time.”

Kruse & Ellsworth, 2011, p. 28



What stories do sidewalks tell?



Are they story-less?

Downtrodden comet, 2019

The iron stone fragments that make their way into sidewalk cement rust through oxidization with air and water. Theirs is an ongoing chemical story.

The rusty bleeds evoke speculation on stars, space, and geologies beyond Earth.

As a conglomerate of various geologic members, a sidewalk can provoke and invoke stories—from others. Like knifings, the marks are literary partners in the oral stories told.

What cultural values are carried in and on these perambulatory pathways? In the future, what stories will sidewalks tell?

HOW DO WE LISTEN TO SIDEWALK STORIES?

How could we story with sidewalks?



Pebble skid marks, 2020

Sonic pebbles



It was a medium-cold February day as we bundled snowsuited children into the strollers. We were off to check in on a decomposing pumpkin at the pond's edge. Arriving at the pond's edge we gathered children around the pumpkin, noting how the orange glowed through the snow cover.

We observed our breath in the air and the hard-packed snow-ice in the neighbourhood.

As we moved around the grassy edges of the pond, we squatted to look for birds. On this day there were no birds. The pond was covered in a layer of ice beneath a gentle dusting of fresh snow.

As part of our pond visits, children collected small fistfuls of pebbles and threw them into the water. This simple habit changed in an instant as we threw pebbles onto the ice.

The water, ice, temperature, and air together with landing and skipping rocks produced echoing, haunting pings. The sonic sounds were the product of pebble reverberations through ice and into the pond water. We were mesmerized, harnessed by this sound experience like a futuristic space soundtrack.

Field Notes, 2020.



Scan the QR code to see and hear the sonic pebbles.

Soundfulness

This sound witnessing moment with sonic pebbles was part of an ongoing exploration of sound. Ears attuned to this place, we considered what soundfulness means with pond, forest, wind, drain, and others. In witnessing sounds we wondered what an attentive sound ethos could inform. Witnessing sound is a way to complexify listening. It is a way to be with place. Like the water sounds of the fish drain, sounds move us. Sounds invite reciprocity, a natural inclination to answer and imitate. Sounds move us to source sound origins and express utterances of delight and inquiry. Actively witnessing sounds is a caring act of respect for the goings-on in a given place at a given time. It is akin to active listening with place.

We engaged with the soundfulness of sonic pebbles beyond the speech structures and loudness of *Schallfülle* (sound fullness), focusing instead on this concept as a way of being and becoming audio witnesses. A sound witness, a term to describe the attentive, reliable observers of crimes who inform legal proceedings, becomes a witness to the realities of precarious climate times (Hennessy & Agarwal, 2019).

As sound witnesses, sonic pebbles become more than an experience from a walk. In witnessing a sound, we acknowledge others—other sounds, other conditions, other participants. The specific weather and temperature conditions on that day allowed for the sonic. It became more than just place specific: it was a gathering of neighbours that included pebbles, air, weather, water, snow, ice, children and educators. The result was to situate ourselves and acclimate to an “in this specific place, at this specific time” way of thinking.


The crunching of the snow underfoot weaves into the soundscape with children’s voices, sonic pebbles, and a cold wind. In witnessing sonic pebbles, the pond generates new ways of being present with others. We begin to hear place. This sonic sound and ensuing echo happen because of a complex and relational combination.



Evidence of sonic pebbles, 2020

Winter, the rotation of the earth, wind, plant dormancy, water, snow, ice, pebbles, and humans collaborate to produce this sound. Simply throwing rocks did not make the sound—all the participants together, in this place, at this time, created this sound.

Other world, other perspectives



As humans, we have certain hearing abilities. In comparison with many other species, our audio range is limited. How do others, below and above the surface, “hear” sonic pebbles? In attending to the sonic pebbles and listening, with care, our behaviours change: Words and spoken language go silent. Because of the intense listening as pebbles skip, the inquiry is muted of human language. Glances, pointing fingers, facial expressions, open mouths, and raised eyebrows are signs the thinking and inquiry is internal.

THE SPOKEN WORD IS THE DOMINANT HUMAN SOUND PRODUCED.

Connecting to sonic pebbles is an opportunity to unword.

Unwording

Asking questions in education is associated with inquiry, learning, and development. But defaulting to spoken language can interrupt the learning and thinking that comes from listening with care. In the act of careful listening, we decentre ourselves. We consider others. Questions and wonderings of experience kept inside allow spaces, places, and moments to remain unpolluted by human voices.

Quieting voices and the urge to speak learning aloud diminishes the human presence in the foreground. It is a way of creating what Olafur Eliasson (Kelsey, 2021) calls “the absence of presence”. While it is impossible to absent oneself, it is possible to minimize one’s presence. What happens when we quiet ourselves to listen? What happens with young children’s ways of being with a place when human voices are quieted?



The ambient is present

Sounds are ever present. Humans, like other species, prioritize certain sounds. Communication, safety, food, and mating are informed, in part, by sounds. With a world of sounds in any given moment and place, the choice of what to hear is a learned behaviour. What happens when we choose to hear previously sidelined sounds? Those marginalized sounds are part of meeting up with place (Massey, 2003). Each of our visits reinforces that the pond is not static: It is in constant movement. Moments with sonic pebbles are what Doreen Massey (2003) explains as “acknowledg[ing] that ‘now’ is itself constituted by that meeting up. ‘Here’, in that sense, is not a place on a map. It is that intersection of trajectories, the meeting-up of stories; an encounter. Every ‘here’ is a here-and-now” (p. 102).

Acquaintance building with pond - as water, as habitat for many, and the stories of pond meetings with ducks, geese, grasshoppers, frogs, pumpkins, dragonflies, bulrushes and pebbles - is predicated on each meeting and its here and now. In quieting human voices to hear the sonic, we decentre the human in the story of this place.

Why is it important to quiet voices and decentre humans? Hearing the plethora of ambient others is a reminder of being a part of something. We play *a* role: the thrower of stones. We do not play *the* role. Hearing sonic pebbles is being part of a collective during a specific time and place.



In this place we hear sonic pebbles.
We develop a lively “alertness to the more-than-oneness of space”.

I am indebted to my partners in this guide.

I am thankful to the place currently known as London, Ontario and its collaborative kin. The forests, ponds, animals, insects, weather and colour are inspiring, informative and lively co-creators.

I am thankful to the children, early childhood educators and families who worked beside me through this process.

Sarah

List of Images

All images by Sarah Hennessy unless otherwise indicated.

Cover

Parking lot snowbank, photo

Introduction

Grape vines and shadows, photo, 2021

Aerial photo of London area, photo, City of London, Planning & development

Colour experiment 16, photo detail of ink on paper, 2020

Pebble skid marks, photo, 2020

Inklings, photo of pen and ink creatures, 2021

Kinscape 1, photo of ink on paper, 2020

European Buckthorn

Uncommon buckthorn, ink and photo transparency collage, 2021

Buckthorn deconstructed, ink cut-out collage, 2020

Buckthorn, pen, pencil sketch, 2020

Buckthorn regenerated, pen, pencil sketch, 2020

Detail, aerial photo of London area, photo, City of London, Planning & development

Uncommon buckthorn detail

Fish Drain

Still image from video, 2019

Colour experiment 7, photo detail of ink on paper, 2020

Fish drain, detail

Shadow place (for Val), image with ink transparency overlay, 2021

Grapevine entwine

Follow, photo, 2019

Entwined, photo, 2019

Communication?, vine detail, 2021

Wild grapes, photo, 2019

Wild grape ink detail, photo, 2021

Black Walnut

Husk hardball, photo, 2020

Black walnut, photo detail, 2019

Inklings, photo of pen and ink creatures, 2021

Ghost, acorn?, pen and ink sketch, 2018

Possible inklings, ink on paper, 2021

Toxic neighbours

Pond visit, computer-enhanced photo, 2019

Lunch, photo, 2019

Toxic neighbour, sketch detail, 2020

Toxic neighbours, photo, 2019

Thistle, photo, 2019

Thistle flower bee butt, photo, 2020

Sidewalk storyboards

Leaf, leaf, photo, 2019

Leaf remnant, photo, 2019

Leaf spirits, photo, 2019

Downtrodden Comet, photo, 2019

Sonic pebbles

Pebble skid marks, photo, 2020

Pond and pumpkin, photo, 2020

Evidence of sonic pebbles, photo, 2020

Sharing, photo, 2019

Evidence as sketch, charcoal, 2020

Detail, Evidence of sonic pebbles, photo, 2020

Back cover

Bottom of the bowl, photo, 2019

References

- Alsobrook, L. (2017). The Title of This Paper Is འོ་ལོ་ལོ་ལོ་ On Asemic Writing and the Absence of Meaning. <https://doi.org/10.22492/ijah.4.2.01>. *IAFOR Journal of Arts & Humanities*, 4(2), 5–13. <https://doi.org/10.22492/ijah.4.2.01>
- Betasamosake Simpson, L. (2017). *As we have always done: Indigenous freedom through radical resistance*. University of Minnesota Press.
- Blaise, M., Hamm, C., & Iorio, J. M. (2017). Modest witness(ing) and lively stories: Paying attention to matters of concern in early childhood. *Pedagogy, Culture and Society*, 25(1), 31.
- Blue, A., Clark, P., Yanez, E., & Andrew-Ihrke, D. (2010). *The raven and the boulders: Akagyugnarli*. Detselig Enterprises.
- Braidotti, R. (2022). *Posthuman feminism*. Polity.
- DeMarrais, K. B., Nelson, P. A., & Baker, J. H. (1992). Meaning in Mud: Yup'ik Eskimo Girls at Play. *Anthropology & Education Quarterly*, 23(2), 120–144. <https://doi.org/10.1525/aeq.1992.23.2.05x1262n>
- Duchscher, T. (2021, April 16). *Towani Duchscher* [Symposium Presentation]. Curriculum and pedagogy for uncertain futures symposium.
- Feeley, C. (2005). *The killer tree* [Extension and outreach news]. Iowa State University. <https://www.extension.iastate.edu/news/2005/jul/070701.htm>
- Graw, I. (2016). The Value of Liveliness. In I. Graw & E. Lajer-Burcharth (Eds.), *Painting Beyond Itself: The Medium in the Post-medium Condition* (pp. 79–101). Sternberg Press.
- Haraway, D. J. (2016). *Staying with the trouble: Making kin in the Chthulucene*. Duke University Press.
- Hennessy, S., & Agarwal, M. (2019). *Soundfullness*.
- Hoffman, M. J. (2020, July 15). *A tiny little subplot of the larger STILL blog story*. <https://www.instagram.com/p/CCrmeA-n5fd/?igshid=YmMyMTA2M2Y=>
- Ingold, T. (2015). *The Life of Lines*. Routledge.
- Instone, L. (2015). Risking attachment in the Anthropocene. In *Manifesto for Living in the Anthropocene* (pp. 29–36). Punctum Books. <https://nova.newcastle.edu.au/vital/access/manager/Repository/uon:22940>
- Kelsey, R. (2021, March 23). *HUCE Special Seminar: Olafur Eliasson*. <https://environment.harvard.edu/huce-special-seminar-olafur-eliasson>
- Kimmerer, R. (2013). *Braiding sweetgrass: Indigenous wisdom, scientific knowledge and the teachings of plants*. Milkweed Editions.
- Kohn, E. (2013). *How forests think*. University of California Press.
- Kruse, J., & Ellsworth, E. (2011). *Geologic City*. Smudge studio.
- Law, J., & Lynch, M. (1988). Lists, field guides, and the descriptive organization of seeing: Birdwatching as an exemplary observational activity. *Human Studies*, 271–303.
- Liu, H., & Stiling, P. (2006). Testing the enemy release hypothesis: A review and meta-analysis. *Biological Invasions*, 8(7), 1535–1545. <https://doi.org/10.1007/s10530-005-5845-y>
- Massey, D. B. (2003). Some times of space. In May (Ed.), *Olafur Eliasson: The Weather Project, 1*. (pp. 107–118). Tate Publishing.
- Massey, D. B. (2005). *For space*. SAGE.
- Ministry of Northern Development, Mines Natural Resources and Forestry. (2021). *Common Buckthorn*. Queen's Printer for Ontario. <https://www.ontario.ca/page/common-buckthorn>
- Nairn, K., & Kraftl, P. (Eds.). (2016). *Space, place, and environment*. Springer Reference.
- Ontario Ministry of Agriculture, food and rural affairs. (2016). *Noxious weed profile, Buckthorn*. http://omafra.gov.on.ca/english/crops/facts/info_buckthorn.htm
- Philippon, D. (2004). *Conserving words: How American nature writers shaped the environmental movement*. University of Georgia Press.
- Plumwood, V. (2008). Shadow places and the politics of dwelling. *Australian Humanities Review*, 44, 139–150.
- Reitmaier, H. (2002). Hello weed. *Tate Etc. Magazine*, 3. <https://www.tate.org.uk/art/artists/michael-landy-2409/artist-project-hello-weed>
- Richardson, E. (2014, March 8). A plant out of place: Michael Landy's weed drawings. *Art/Critical/Theory*. <https://mypad.northampton.ac.uk/artcriticaltheory/2014/03/08/a-plant-out-of-place-michael-landys-weed-drawings/>
- Scheese, D. (1996). *Nature writing: The pastoral impulse in America*. Twayne Publishers.
- Shaffer, M. S., & Young, P. S. K. (2015). *Rendering Nature: Animals, Bodies, Places, Politics*. University of Pennsylvania Press.
- Shotwell, A. (2016). *Against purity: Living ethically in compromised times*. University of Minnesota Press.
- Truman, S. (2018). SF! Haraway's Situated Feminisms and Speculative Fabulations in English Class. *Studies in Philosophy and Education*, 38(1), 31–42. <https://doi.org/10.1007/s11217-018-9632-5>
- Van Horn, Kimmerer, R. W., & Hausdoerffer, J. (2021). *Kinship: Belonging in a world of relations* (Van Horn, R. W. Kimmerer, & J. Hausdoerffer, Eds.). *Center for Humans and Nature*.
- Whitehead, A. N. (1978). *Process and Reality*. Free Press.



**Go make your own
uncommon field guide
with the world**



Inklings:

Becoming With
a Palette of Place

Sarah Mim Hennessy

Exhibition

October 2022

Preface

The exhibit *Inklings: Becoming With a Palette of Place* is invitational in nature. The works are an offering of, and storying with, place. I build a layered research relationship with colour, plant, place, and people. The exhibition includes original works generated over time through relations with complicated more-than-human worlds.

Inklings contributes to the Climate Action Network (CAN) project, an international collaboratory researching climate change pedagogies with young children. I use a methodology of research-creation that combines creative expression and experimentation with academic research practices to further knowledge. The art included in this exhibition is from both my research with children and educators at an early learning centre in southwestern Ontario (between September 2018 and February 2020) and personal process works undertaken offsite. Each of the pieces informs an area of my research. For this exhibition, all but one of the works are from my personal synthesizing process, with the exception of “Buckthorn Regenerated.”

This exhibition is situated within a common worlds approach (Common Worlds Research Collective, 2022) that understands humans as part of, not separate from, nature. I consider how a common-worlds-informed approach in early education supports young children to think *with* the planet and other species beyond humancentric ways. Place is messy and entangled and shared by many. A new possible place becoming with works such as “*Inklings*”, “*Kinscape 1*”, “*Kinscape 2*” and “*Possible Flora*”, “*Possible flora 2*”.

The place of study is a growing community, a product of population growth on the transforming traditional lands of the Anishinaabek, Haudenosaunee, Lūnaapéewak, and Chonnonton peoples. I am thankful to know and research with this place and the peoples who have been its custodians for millennia. This land, home to diverse First Nations peoples, is changing rapidly from farmland to developed suburban housing, making this place many places at once: traditional lands, farmland, subdivision, and changing habitats for many.

Perhaps most visible in the works presented in this exhibit are the natural, foraged, and created inks from the place of study. I refer to these inks as a palette of place, because the phrase denotes the intimacy of generating small batches of colour as a way to materially engage with place. The foraged palette is locally sourced as part of acquaintance building with buckthorn, sumac, wild grapes, found copper, black walnut, pokeberry, and goldenrod.

If there is a product of place relations, this palette is a representation of our relationship. I think of this palette as an ongoing process instead of a definitive product. Similarly, this is *a* palette of place, not *the* palette of place.

This exhibition is a companion to my Uncommon Field Guide. “Inklings,” “Buckthorn,” “Buckthorn Regenerated,” “Uncommon Buckthorn,” and “Shadow Place (for Val)” are featured in the guide, alternatively rendering the complicated realities of worlds we are part of.

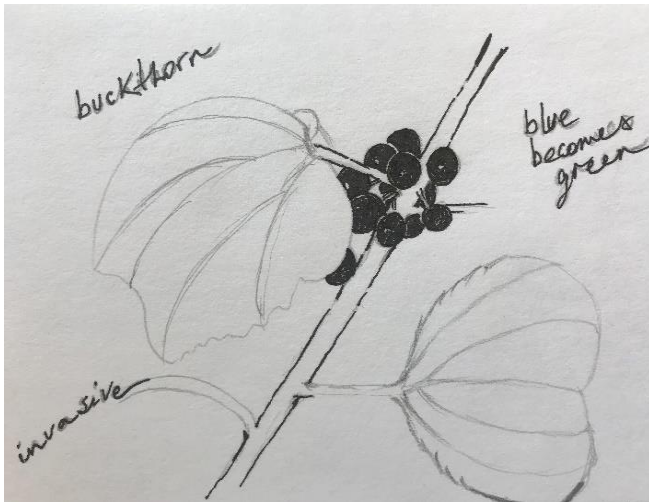
Each work in the exhibition is accompanied by a provocation. As written siblings to the works, these provocations are my responses to the work, shared in an effort to engage viewers in the ongoing thinking with place (Klein & Loveless, 2020). The provocations are invitations to be perplexed, think otherwise, and trouble the work. Putting art and provocation together is an effort to foster consideration, not a conclusion.

Sarah Hennessey.



This exhibition is dedicated to my great-great-aunt Anne Savage, who continues to guide me in understanding life, art, and education.

Field sketches

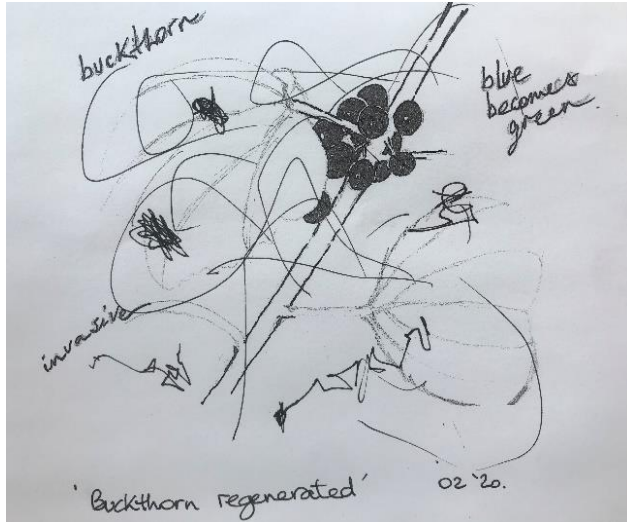


Buckthorn. Pen, pencil sketch, 2020

Our buckthorn-human relations began with a berry-rich buckthorn bush and young children. After stopping and witnessing berries fall to the ground, a child said, “like rain.” The children shook the branches to create more berry rain. They collected fistfuls of berries. We discussed birds eating the berries. We noticed stained hands and clothes. An educator identified the plant as buckthorn and continued by naming it as an invasive species, a term used for species that are not native or indigenous to the place: They are nonhuman settlers introduced post-contact. Settlers imported buckthorn alongside the European tradition of natural field dividers, forever changing local plants and animal diets in Canada.

After our walk, we returned to the playground and sat outside washing our stains. I sketched out a portion of the buckthorn branch. The sketch includes branch lines that lead to words and connect to thoughts as an attempt to dialogue with berry rain, stained hands, and complicated terms.

The experience, stains, art, and buckthorn conversation are an example of thinking with common worlds. The educator/child/researcher relations with buckthorn were not solely human focused. Instead, children and educators connected buckthorn to rain and birds. The powerful colour in the berries stained human skin, clothes, and sidewalks. Sharing a world with buckthorn also stains our complicated relationship with this plant. We can interrupt stories of harmless settlers, name consequences of farming practice, and consider alternative behaviours of introducing the new and unsettling ecosystems.



Buckthorn Regenerated. Pen, pencil sketch, 2020

The children watched me sketch the branch. I photocopied my original field sketch, “Buckthorn” and invited the children to renew the sketch as we revisited our stories and memories. As we layered regenerated stories, walks, memories, and conversations, these marks became a practice and product of relationship building with buckthorn.

Provocation

As Leanne Betasamosake Simpson (2017) explains, wisdom, which is built from the ground up in Nishnaabeg epistemology, is continually regenerated through the relationality of the person and their community. How then are these new layers of stories and new marks on sketches acting to reconfigure relations with buckthorn?



Possible.

Natural inks, 2022

A Palette of Place

Making ink emerged from children's engagements with pumpkin, wild grapes, and buckthorn. The children repeatedly witnessed the intimate relations of touching pumpkin innards and squeezing berries. The colours mark skin, clothes, sidewalks, grass, and paper. The purples and oranges are visual evidence of physical connections with pumpkin, buckthorn, and grape. The coloured stains on skin are memory cues of kin relations and worldly wanderings with place.

While thinking with inks began with children, making inks as material creation is a material collaboration with. Inks provoke me, as artistic invitations to paint with it, to see it with, to move with, to know with. The experimental responses inspire new observations, understandings and works of art.

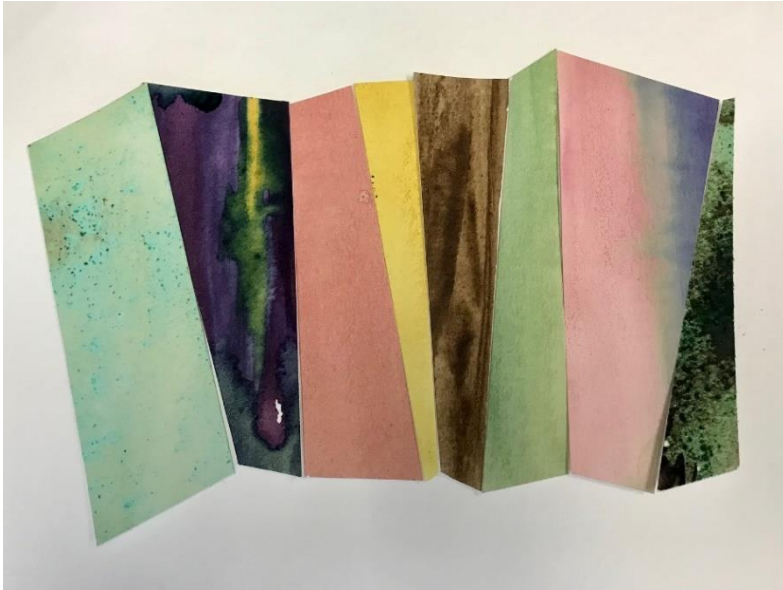
Experiments include waste. Instead of indulging in a habit of discarding what is not used, I save every tiny bit of ink as evidentiary remnant of process and relations. Each remnant is saved and treasured. Revisiting waste as a method directly contributes to an ongoing ethical relationship with materials and place.

The pandemic conditions contribute to this work. During the first few months of physical distancing, I experimented with the remnants and an Exacto knife. Removing the white spaces between ink shapes enabled visual layering, bringing depth, dimension, and presence. For me, the layering connects to understandings of the entangled nature of sharing a common world (Common Worlds Research Collective, 2022).

Provocation

How can colour inform understandings of place?

When colour is understood as a force what does place become?



A Palette of Place. Foraged inks, 2020

From left to right: rusted copper, goldenrod and wild grape, sumac, goldenrod, , black walnut, buckthorn, pokeberry with wild grape, rusted copper infused with buckthorn.

“A Palette of Place” is a collection of the colours created with place. It acts as a reconfiguration of experimental ink ends.

As “Ink Time,” “Kinscapes,” and “Possible Fauna” detail, the works are still becoming. The colours will change as they mingle with light, air, moisture, and more.

As I build a deeper relationship with this place, I forage and prepare inks. This process morphs the blue sky, green grass, and grey roads into a different way to understand place. The process begins with identifying and learning about a plant, its growth cycle, and its chemistry. To ensure the most potent colour, I gather at particular times. I find bare grape vines in late Fall and Winter and note the location to revisit in Spring and Summer for harvesting.

Provocation

If there is a product of place relations, this palette is a dialogue of our relationship. I prefer to think of palette creation as an ongoing process instead of a definitive product in the same way it is *a* palette of place not *the* palette of place. Considering a palette of place becomes a question of what does colour do? What happens when we consider colour as “not something that a substance ‘has’ but rather something that it ‘does’”(Finlay, 2007, p. 6)?



Narrated work

Sometimes writing is not the best method to understand or explain. “Narrating With” is a layering of voice, ink, movement and intra-action. Instead of interactions between ink, paper and me as separate entities, intra-actions (Barad , 2003, 2014) suggest that individuals materialize in the between of their entanglement. This is to say, I know ink in the act of painting with it. A new world becomes in the relationship between ink, paper, mood, air, self, theory, and more: The reconstituting together with cocreators’ ink, paper, air, pollen, chemical compound, fungal spores is a collaborative effort. The “evidence” of intra-actions is both the work and the video. I acknowledge that the intra-actions continue without me.

Provocation

Listening, I wonder about the variety of audience members. The audience changes. It flows between self, inks, art, and viewer: The dialogue is ink-to-ink, ink-to-paper, ink-to-chance (drips) and ink-to-artist (eventually relayed to audience). With ink-to-ink I am audience, and I listen with my eyes.

In the unscripted narration, provocations organically occur as ink, brush, paper, air, and artist connect and create worlds/works together. Happenings in the intra-action of colours, sediments, water, and paper are worlding.



An Uncommon Field Guide



Shadow Place (for Val). Video still of fish drain with ink overlay, 2021



Scan the QR code to see and hear the fish drain.

“Shadow Place (for Val)”, “Uncommon Buckthorn,” and “Inklings” are entries in *An Uncommon Field Guide* (Hennessy, 2022).

Drains are entry points that take away what we are done with: They put out of sight what we do not want to see. Drains are a meeting place. At this particular drain, water, leaves, garbage, bacteria, the living, and the dead congregate and move through the grate before dis(appear)ing below. For brief moments children, educators, and researchers see this convergence. We hear the echoing, liquid movements. We catch whiffs of activity from below. Drains have a long partnership with human settlement health habits. Our species’ collective need to live together works, in part, because we are able to source fresh water and expel excess and contaminated water. From Hades, Persephone, and the River Styx to the engineering feats of ancient Rome, drains carry complex human histories.

Provocation

What flows below the drain is messy and real. It is also not innocent. If we ignore, pass by, or dismiss the drain as a shadow place (Plumwood, 2008), are we contributing to Plumwood’s “false consciousness of place” (p. 139)? What are the consequences of this act? A walk around a parking lot on a frigid winter day is a reminder that we create and live with drains.



“Images don’t speak for themselves.

Collage is a way of seeing.”

Wendy Luttrell (2019)

Like collage, the act of layering is part of the thinking process. Aerial images of the early learning centre community, shared by a parent, contribute a different perspective of place. How we experience place is layered, bringing a compilation of perspectives. Overlaying the texture of leaves, branches, and berries with a built community can be a visual suggestion of a problematic human lens of superiority.

The bright green of the leaves in the image is ink created from buckthorn’s deep purple berries. Through the alchemy of lye, dark purple berry juice, oxygen, and water become vibrant green. The darker green leaves are the confluence of buckthorn green with black walnut brown. The brown branches are made with black walnut. The purple berries are rendered from the neighbouring wild fox grapes. As a collage with buckthorn, black walnut, and wild-grape-generated inks, “Uncommon Buckthorn” is a reincarnation of plants where staining powers become a story of a place.

A first step was cutting Ink-soaked pages to form the shapes of the stem, leaf, and berry parts of the buckthorn, later assembled on black paper. The final layer added is a transparency of the aerial photograph of the community, resulting in the texture of buckthorn leaves as the ever-expanding subdivisions and paved roads that decrease the farmland and woodland to renovate the place to suit changing human needs.

Provocation

Histories are not in the past.

We live layers of histories.

How can these layers differently inform
place relations?

Inklings



Inklings. Ink and pen, 2021

Provocation

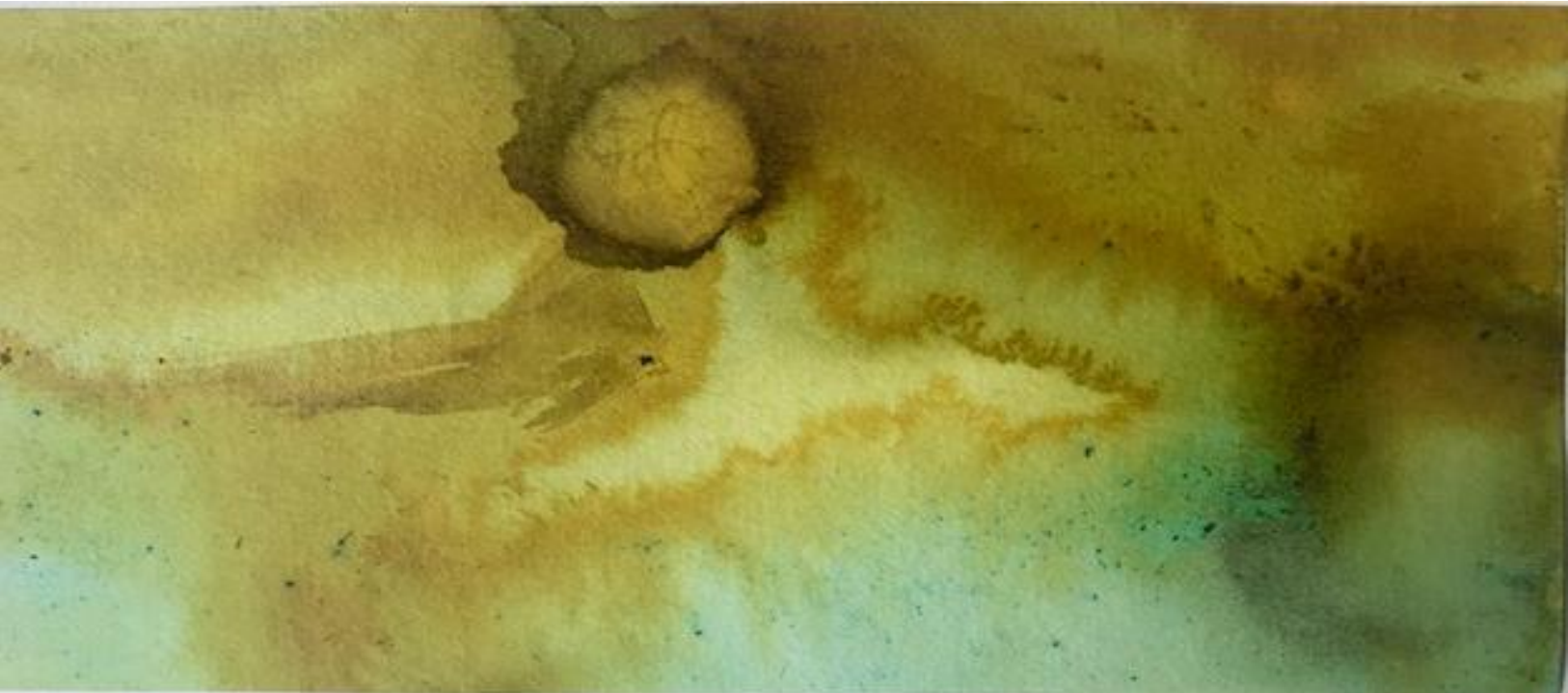
Born from experimental blobs of ink, inklings are imagined beings with a palette of place. Blobs become speculative others. Inklings are a reconfiguring of ink materiality with imagination and contemplation of a world becoming with climate change.

Inklings are speculative partners from this place. They are imagined in-betweeners that combine human creative thinking with the palette of place. They are ideas coming to fruition. They are incomplete creatures, animating and populating a shared in-between. The delicate nature of these creatures is juxtaposed with the complicated realities of place.

Curiously, Inklings is also the name of J.R.R. Tolkien and C.S. Lewis's Oxford literary club from 1930–1949*. My inklings share speculative, possible worlds with the imaginaries of Middle Earth and Narnia. These inkling creatures differ from the club because they remain tied to the pragmatic realities of climate change.

*The [Oxford literary] club met weekly for twenty years to discuss literature, ideas, religion, walking, and critiquing each other's works. All members valued both narrative and speculative fiction (Zaleski & Zaleski, 2015).

Kinscapes



Kinscape 1. Goldenrod and copper ink on paper, 2020

Indigenous author Chelsea Vowel (2022) thinks with kinscapes. As concepts, kinscapes and common worlds are related ways of understanding humans. A kinscape is a relationality that includes both human and nonhuman relatives and the specific place where those relations exist. Vowel explains it as a geographically specific space of relations that rejects the generalities of people, plants, and animals as an unspecified, amorphous conglomerate.



Kinscape 2. Buckthorn, copper, and black walnut ink on paper, 2020

Provocation

These kinscapes are many things at once. They are constantly changing experiments with ink, oxygen, and time as if they are breathing.

The urge to cling to a final product, a work of art, is foiled, and my control as an artist is removed. As the works change, my control is diminished.

What can we learn in the space of lost control?



Possible Flora. Ink remnants collaged, 2020



Possible Flora 2. Ink remnants collaged, 2020

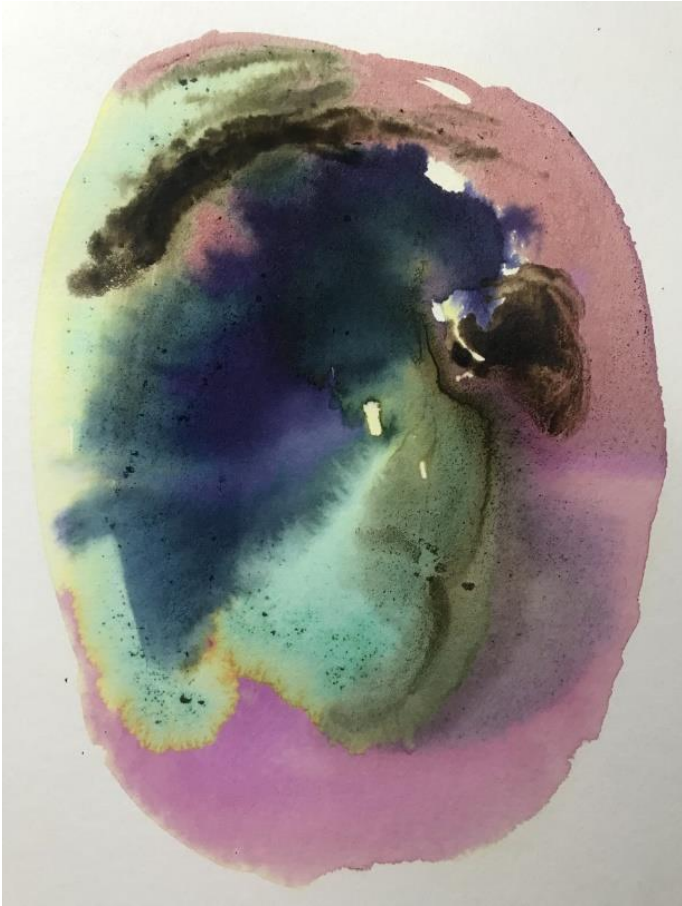
The collages began with an experimental question, *what can I make?*

What was made became an imagined populating of a possible world?

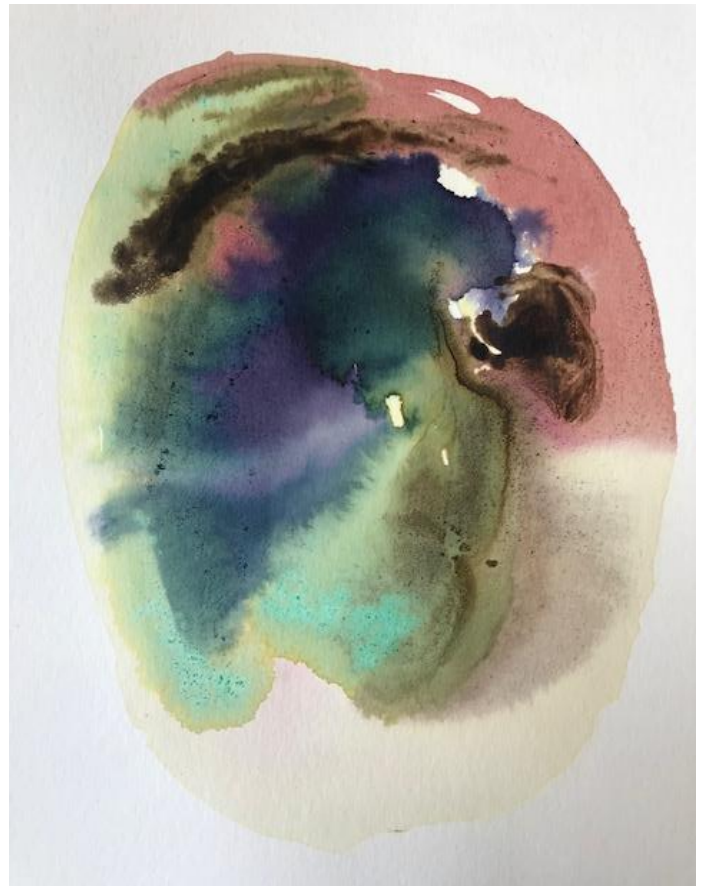
Provocation

Entering an imagined future place affords speculation to consider what else. I wonder with “Possible Flora” and “Possible Flora 2” about the maybe plants.

The assembly is playful, trying “what else” and “maybe” with ink. Imagination and playful wonderings contribute to new ways of thinking.



Ink Time. Photo, November 10, 2020



Still Becoming , photo, May 12, 2022

Ink Time

“Ink Time” and “Still Becoming” encapsulate the mystery and alchemy of ink time. The change, with ink time, is the result of art without humans. In ink time, the specific air, paper, and inks are active. While human time is assigned to the works, as calendar dating, inks continue to manifest in many ways. The outer ring of red (sumac) and pink (pokeberry) have different ink times visible with pokeberry fading to pale yellow and the red intensifying. With “Ink Time” the work is in a constant state of change. By comparing “Ink Time” with “Still Becoming” it is possible to see that there is more than one ink time occurring simultaneously.

Provocation

Can I sign this work if I am not the only creator?

Can I date this work if it is still becoming?

As an artist I don't feel comfortable signing this work. That act of signing would reinforce the human as creator, discounting/dismissing the cocreators .



Inseparable

“Between Sure and Unsure” is a process piece reinforcing my inability to separate artist-researcher-educator when they are one. I cannot paint without thinking. I wonder while painting. I explain my process to others. There is no mention of gold fences or roots in my research and yet this piece creatively encapsulates my research in education.

Provocation

What do we lose when we try to separate research from art? The translucence and fragility of both fence (a human construct) and root provoke the role of art and imagination in addressing precarious ecological times.



Artist Biography

How do imagination and creative speculation inform methods and pedagogies in education? As an artist-researcher-educator, I carry this question through my experimentations, materials, and footprint. Art and its creation is one of the ways I learn. It is a way I experiment, conceptualize, play, and dream. Creative expression is thinking, planning, discussing, gathering, and doing. Gloved and walking through the tall grass to forage colour is a creative expression: The connection with the plants, insects, air, breeze, and more invokes and fertilizes my thinking.

I work with a variety of materials, including, paint, ink, pen & ink, collage, photography, video, and encaustics. Dabbling in materials is hard and philosophical work, following my intrigue, testing potentials, failing, and existing in the mode of trying something new. Foraged ink as a new material is the latest, not last, engagement.



Photo of artist at work, April 7, 2020,
courtesy of Ashley Hennessy
(with permission)



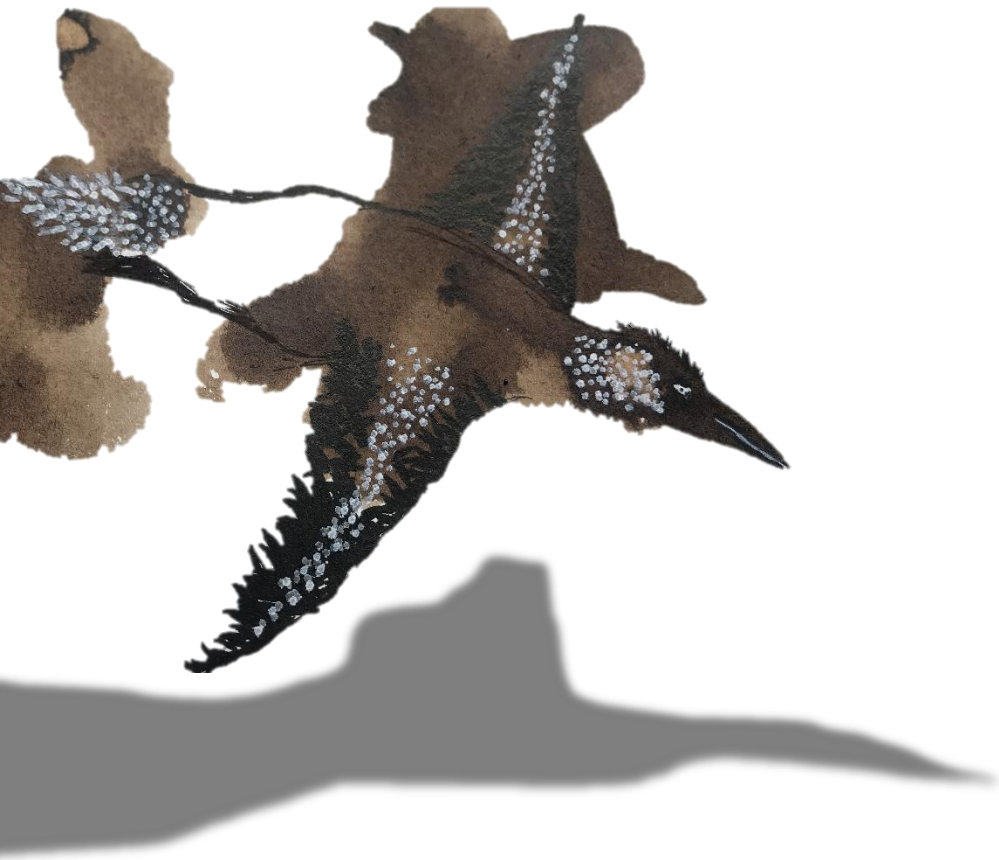
Foraging a palette. Photo of author, 2020,
courtesy of M. Agarwal (with permission)

List of works (In order of appearance)

Still Becoming (cover)	Sumac, black walnut, copper and buckthorn ink on paper, 2020, 12cm x 10.5cm
Buckthorn	Pen, pencil sketch, 2020, 15cm x 10cm
Buckthorn Regenerated	Pen, pencil sketch, 2020, 16cm x 14cm
Possible	Foraged inks, 2020, 30cm x 40cm
A Palette of Place	Foraged inks, 2020, 19cm x 21cm
Narrating With	Ink on paper, 2021, 75cm x 55cm
Shadow Place (for Val)	Video still of fish drain with colour laminate copy ink overlay, 2021, 19cm x 14cm
Uncommon Buckthorn	Ink and black & white laminate photo overlay, 2021, 19cm x 19cm
Inklings	Wild grape and black walnut inks and pen and paper, 2021, varying sizes ranging from 5cm x 5cm, 8cm x 8cm, 10cm x 10cm, 14cm x 10cm
Kinscape 1	Goldenrod and copper ink on paper, 2020, 24cm x 11cm
Kinscape 2	Buckthorn, copper, and black walnut ink on paper, 2020, 23cm x 8cm
Possible Flora	Ink remnants collaged, 2020, 25cm x 17cm
Possible Flora 2	Ink remnants collaged, 2020, 25cm x 18cm
Ink Time	Photograph, November 10, 2020, 25cm x 17cm
Still Becoming	Pokeberry, copper, wild grape, black walnut, sumac ink on paper 17cm x 25cm
Between Sure and Unsure	Acrylic paint, pen on plywood, 2020, 61cm x 61cm
Inkling (back cover)	Black walnut ink, pen, 2021

References

- Barad, K. (2003). Posthumanist performativity: Toward an understanding of how matter comes to matter. *Signs*, 28(3), 801–831.
- Barad, K. (2014). Diffracting diffraction: Cutting together-apart. *Parallax*, 20(3), 168–187.
- Common Worlds Research Collective. (2022, June). [Website]. <https://commonworlds.net/>
- Finlay, V. (2007). *Color: A natural history of the palette*. Random House.
- Instone, L. (2015). Walking as respectful wayfinding in an uncertain age. In K. Gibson, D.B. Rose, & R. Fincher (Eds.), *Manifesto for living in the Anthropocene* (pp. 133–138). Punctum Books. DOI:10.21983/P3.0100.1.00
- King, T. (2003). *The truth about stories: A native narrative*. House of Anansi Press.
- Klein, J., & Loveless, N. (Eds.). (2020). *Responding to site: The performance work of Marilyn Arsem*. Intellect.
- Latour, B. (2004). *Politics of nature: How to bring the sciences into democracy*. Harvard University Press.
- Lévi-Strauss, C. (1966). *The savage mind*. The University of Chicago Press.
- Luttrell, W. (2019). Reflexive qualitative research. In *Oxford Research Encyclopedia of Education*.
- Plumwood, V. (2008). Shadow places and the politics of dwelling. *Australian Humanities Review*, 44(2), 139–150.
- Simpson, L. B. (2017). *As we have always done: Indigenous freedom through radical resistance*. University of Minnesota Press.
- Taylor, A. (2013). *Reconfiguring the natures of childhood*. Routledge.
- Vowel, C. (2022). *Buffalo Is the new buffalo*. Arsenal Pulp Press.
- Zaleski, P., & Zaleski, C. (2015). *The fellowship: The literary lives of the Inklings: J.R.R. Tolkien, C.S. Lewis, Owen Barfield, Charles Williams*. Farrar, Straus and Giroux.



Inklings: Becoming With a Palette of Place ©

An exhibition by Sarah Hennessy

London, Ontario, Canada

October, 2022