

Common Worlding Pedagogies: Cultivating the 'Arts of Awareness' with
Tracking, Compost, and Death

By

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Bachelor of Arts (Honours), University of Victoria, 2008

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of the Requirements for the Degree of

MASTER OF ARTS

School of Child and Youth Care

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Supervisory Committee

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Abstract

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This thesis foregrounds moments from an early childhood centre's multispecies inquiry to grapple with the question of what pedagogies and practice might need to look and feel like to create the conditions for new ways of thinking and doing with other species in troubling times. Drawing on post-foundational feminist conceptual frameworks, it takes an interdisciplinary approach to challenging dominant narratives about young children's more-than-human relations in a rapidly changing world. In the first chapter, I discuss tracking with young children as a generative method for cultivating the arts of awareness and opening up our understandings of place relations. In the second chapter, I reconfigure care as a multispecies achievement to explore the question of what it means to care *with* and not just *for* the creatures who thrive inside of an early childhood centre's worm-compost bin. In it, I juxtapose compost inquiry moments with the material consequences of out-of-sight-out-of-mind approaches to managing our untenable food waste in contemporary Canadian society. In the final chapter, I share moments from an early childhood centre's unexpected encounter with a dying rat to rethink children's relations with death in an age of accelerated mass extinctions. What does it mean to care with a creature few want to claim, but with whom we are connected in unsettling ways?

Key words: early childhood; ethics; Anthropocene; compost; death; nature

Table of Contents

<i>Supervisory Committee</i>	<i>ii</i>
<i>Abstract</i>	<i>iii</i>
<i>Table of Contents</i>	<i>iv</i>
<i>List of Figures</i>	<i>v</i>
<i>Acknowledgements</i>	<i>vi</i>
<i>Dedication</i>	<i>vii</i>
<i>Chapter 1 Cultivating the ‘Arts of Awareness’ Through Tracking Pedagogies</i>	<i>1</i>
Thesis overview	<i>3</i>
<i>Situating my research</i>	<i>6</i>
Common worlding childhoods.....	<i>9</i>
Multispecies Inquiries in an Early Childhood Centre	<i>11</i>
Walking and Tracking as Common Worlding Method	<i>14</i>
Moments Together	<i>21</i>
The Point of Engagement	<i>23</i>
<i>Chapter 1. References</i>	<i>26</i>
<i>Chapter 2 Composting pedagogies: Ecologies of care in early childhood-vermicompost relations</i>	<i>32</i>
Keeping Worms	<i>37</i>
Figuring rot.....	<i>39</i>
Dirty Work.....	<i>45</i>
The politics of waste-worlding.....	<i>48</i>
Just like us.	<i>51</i>
Do worms really <i>care</i> ?.....	<i>52</i>
Can we care <i>too</i> much?	<i>55</i>
Decomposing politics	<i>57</i>
Composting Ecologies of Care.....	<i>58</i>
<i>Chapter 2. References</i>	<i>61</i>
<i>Chapter 3 Rats, death and Anthropocene relations in urban Canadian childhoods</i>	<i>66</i>

List of Figures

Figure 1-1. "What does it mean to really share a space?" (van Dooren & Rose, 2012)	12
Figure 1-2. Messiness of place: trace, tracks, and other(wise) encounters	15
Figure 1-3. Paying close attention to other ways of storying place	16
Figure 1-4. Reading for refusal	17
Figure 1-5. Remnants left behind.....	20
Figure 2-1. "With whom or what are we obliged?"	35
Figure 2-2 Vermiculture togetherness (image: Nelson, 2017).....	41
Figure 2-3 Sympoietic entanglements	42
Figure 2-4 "I found an eggshell!"	48
Figure 2-5 Just like us	52

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Dedication

To my brother, Kirk.

Pursing a master's degree was, after all, a sister's response to losing you too soon. But, of course, you are still 'with us' and for that I am so grateful.

Chapter 1 Cultivating the ‘Arts of Awareness’ Through Tracking Pedagogies

Abstract:

This paper draws on feminist and interdisciplinary perspectives to rethink ethical approaches to young children’s more-than-human relations. In it, I provide an overview to a common worlding conceptual approach in early childhood education with the intention of opening up space for embracing and telling otherwise stories capable of foregrounding our shared inheritances and vulnerabilities with other creatures on this planet. In this discussion I take up tracking-walking as a generative method for cultivating the ‘arts of awareness’ with young children on the urban, southern tip of Vancouver Island.

The histories that we tell are themselves acts of inheritance, they're modes of not just inhabiting, but inheriting the world, which is to say that the aspects of the world that we nurture into the future are, in part, determined by the histories that we tell. (van Dooren, 2014, online lecture).

In the twenty-first century, young children's relations with more-than-human others have become a topic of concern in childhood studies, in conjunction with the naming of a new Anthropocene geologic era to mark the profoundly disruptive influence of human activity on planetary systems (Fawcett, 2013; Malone, Truong, & Gray, 2017; Melson, 2013; Nxumalo & Pacini-Ketchabaw, 2017; Pacini-Ketchabaw, Taylor, & Blaise, 2016; Taylor, 2017). Often romanticized and framed as curative in their essence, child-animal relations tend to be underscored by two powerful narratives in contemporary Euro-Western society. On one hand, post-Enlightenment stories depict young children as 'close to nature', placing emphasis on interspecies relationships as a conduit for children's emotional, moral and cognitive development (Chalwa, 2007; Collado & Staats, 2016; Cox, Shanahan, Hudson, Plummer, Siriwardena, Fuller, et. al, 2017; Louv, 2008; Nisbet & Lem, 2015). On the other hand, Anthropocene narratives imbue childhood with an overwhelming sense of anxiety and loss, wherein the 'future child' stands poised to inherit an abbreviated life, denied the opportunity to 'meet with' a growing list of near-vanishing animals in wake of Anthropocene foreclosures (Haraway, 2016; Heise, 2016; Russell, 2016).

Both stories render childhoods as universal and suspended in an innocuous state of not-yet-fully-formed existence (Taylor, 2013). Neither place young children 'near the action' in these challenging times, nor depict them as capable of contributing to the creation of new possibilities for living together with more-than-human others. These narratives also fail to account for the role animals, plants and landscape forms actively play in co-constituting

children's everyday relations and, indeed, the very places we live (Taylor, 2017). It is against this backdrop that I argue in this thesis for "cultivating the arts of awareness" (Tsing, 2015; van Dooren, Kirksey, & Münster, 2016) as a response to living and learning in challenging times, with a view to thinking expansively in early childhood education about our shared inheritances and vulnerabilities with other creatures on this planet (Haraway 2016; Rose & van Dooren, 2013; Tsing, 2015).

Thesis overview

This thesis foregrounds moments from an early childhood centre's multispecies inquiry to grapple with the question of what pedagogies and practice might need to look and feel like to create the conditions for new ways of thinking and doing with other species in troubling times (Pacini-Ketchabaw, Taylor, & Blaise, 2015). To be clear, I do not mean this in a 'teaching a new generation of eco-heroes to go out and save-the-world' sense. Rather, picking up on Val Plumwood's (1993) critique of the fantasy of human control over nature, I suggest that we open ourselves up to early learning approaches that work to abandon the delusion of mastery over nature. This involves a subtle but important shift in the way we engage with and understand young children's relations with plants, animals, fungi and other creatures they encounter on a day-to-day basis. To do this I take up Franklin Ginn's (2013) provocation to rethink relational, everyday ethics by "widening the bestiary of companion species" (p. 532) we tend to embrace in early childhood education (Nxumalo & Pacini-Ketchabaw, 2017; Rautio, Hohti, Leinonen & Tammi, 2017). In particular, I am interested in encounters with compost critters, food waste, rats, and death in early childhood that push back on mechanistic understandings of what it means to care for more-than-human others. Dahlberg and Moss (2005) discuss "[t]he meaning of 'care'

[as something] rarely gone into with any rigour, leaving it loosely defined by association” (p. 91). What happens when we are called to nourish care-*full* associations with creatures most people would rather do without? What associations might be necessary for reconstituting notions of caring for other creatures as a form of ongoing reciprocity, or bidirectional *caring with*? (Rose, 2013) And how might we promote a thicker notion of care, as something more than a pure and idealized event, in early childhood education? (Dahlberg & Moss, 2005; Hodgins, 2014)

This thesis is comprised of three separate papers. The first one offers a broad introduction to the research project and contextualizes papers two and three within the framework of a common worlding pedagogical approach. In this article, I begin by situating myself on Western Cree and Lekwungen-speaking peoples’ lands, sharing my conceptual framework, and describing the ethnographic walking-tracking methods I have engaged with over the past four years of working with a generous group of three-to-five year old children, educators, and fellow researchers. Taking an interdisciplinary approach, I draw on post-foundational feminist early childhood studies scholars, environmental humanities and other academic disciplines, as well as Indigenous philosophical and techno-science standpoints to outline a framework within which I reconceptualise young children’s relations with nature and, in particular, their everyday relations with unsettling creatures. This introductory paper highlights my wider intention to offer more than a critique of dominant approaches to early learning education. As I discuss, this thesis is written as part of an ongoing commitment to work towards unsettling dominant Euro-Western frameworks of understanding about children’s relations with the so-called natural world and our place in it as humans (Nelson, Pacini-Ketchabaw, Nxumalo, in press).

In the second paper, entitled “Composting pedagogies: Ecologies of care in vermicompost relations”, I present the affective figure of rot as a lively, if unsettling, presence in early childhood compost pedagogies. Here, I explore ‘rot relations’ as a transformative phenomenon capable of drawing us into new obligations and better understandings of our mutual vulnerabilities with others in our worm-compost-food-waste entanglements. What, for example, does it mean to care *with* a box of compost critters and not simply *for* the worms and other teeny tiny lives who thrive on our food waste? This paper looks at the material consequence of local municipal waste politics and their connections to and influence on young children’s worm-compost relations as well.

The third and final paper of this thesis, entitled “Rats, death and Anthropocene relations in urban Canadian childhoods” highlights moments from an early childhood centre’s unexpected encounter with a dying rat to rethink children’s relations with death in an age of accelerated mass extinctions. In it, I reconsider ethical responses to death beyond the binary logics of what Val Plumwood (2003) calls a ‘human supremacist culture’ that overwhelmingly takes animal death as an opportunity to reify “apartness, domination and individual salvation, rather than for sharing and nurturing a community” (para. 10; Rose, 2013) with other creatures.

Papers two and three are written as manuscripts for publication and, as such, work as stand-alone pieces. As separate manuscripts, each paper outlines my conceptual framework and includes a methods section. This introductory paper provides a context for the thesis discussion, aimed at bringing papers two and three together and fill in any gaps that might emerge in each of the stand-alone pieces. Although the methods and conceptual framework sections of each paper varies in accordance with their respective manuscript theme, there may be some repetition due to the format I have chosen for this project.

Situating my research on Lekwungen-speaking territories and Western Cree Treaty 8 country

I come to this research project from the perspective of a white Canadian settler woman of mixed Nordic-Scottish descent. I was raised in the beautiful but resource extraction-weary Western Cree Treaty 8 country (Treaty 8 First Nation, 2018), often depicted in the media as the North American socio-economic ‘frontier’ (Haavardsrud, 2016; Williams, 2018). This stands in stark contrast to the way many Canadians imagine the Lekwungen-speaking people’s territories on which I now live and work. Otherwise known as Greater Victoria, on Vancouver Island, BC, this region has its own rich histories and ongoing forms of colonial violence (Penn, 2006), however today is widely recognized as being an idyllic tourist destination, with pro-environmental, left-leaning tendencies.

Within this milieu, the Cache Creek Early Childhood Centre, where my MA research took place, is largely comprised of children and families belonging to a fluid, white and racialized, middle-class workforce, a number of whom come from other parts of the country or abroad to work or study at a neighbouring post-secondary institution. Six early learning classrooms make up the centre, each of which are grouped according to ages including an infant room, toddler rooms, and a couple of three-to-five year old classrooms, with construction currently underway to make room for two more. The Cache Creek educators and staff have been an incredibly open and dynamic group of (mainly) women to work with and learn from. To date, a number of them have worked with a common worlds approach for approximately five years. In that time some of the educators have published journal articles (Land & Danis, 2017; Hodgins, Yazbeck, & Wapenaar, in press; Haro Woods, Nelson, Yazbeck, Danis, Elliott, *et. al.*, in press; Wapenaar & DeSchutter, in press; Yazbeck & Danis, 2015), presented to families and colleagues, made formal presentations at academic conferences, participated in the conceptualization, curating and

installation of three photo-art exhibits, and engaged in a formal process of reimagining the centre's working ethos to guide the organization's early learning practices. Some of the educators also take part in, and occasionally lead, group discussions during evening and weekend reading group seminars offered each year by a pedagogical facilitation team from the local university, in which I participate as research assistant. The seminars are designed to support educators, staff, and researchers to engage with a range of literature to reflect on inquiry documentation and think expansively together about early childhood pedagogies and practice in a rapidly changing world. I list these achievements in recognition of the educators' and staff members' hard work and willingness over the past five years to engage in an ongoing process of critical reflection and experimentation with their pedagogies and practices. At its core, this work is aimed at generating a space within which we work collectively to challenge the underlying colonial, consumer-culture attitudes and values that continue to influence our pedagogical relations and have contributed so much to the very making of the troubling times within which we now find ourselves.

With critical reflection in mind, I want to return for a moment to my ongoing connections to the territories on which I grew up and the ones on which I now reside. Foregrounding these connections along with recognizing the dominant socio-economic expressions imposed on each place feels vital with a view to shedding light on the ways in which, in the words of Taylor and Giugni (2012), "spatialized constellations of hidden and visible asymmetrical power relations" (p. 114) continue to inform my writing and my role as mother, auntie, canine-companion, pedagogista, life-partner, researcher, daughter, sister, friend, colleague, municipal agitator, and graduate student. I am deeply grateful to have had the opportunity to live and learn on the Songhees, Esquimalt, and WSÁNEĆ peoples' territories off and on for fifteen years. The

abundance of this place and generosity of its inhabitants, human and otherwise, humble and astound me on a regular basis. Despite living here for a significant amount of time, however, I still feel a strong affiliation with the people and place I grew up and consider myself to be a Treaty 8 person in alignment with the West Moberly First Nation Chief's, Roland Wilson, recent reminder to British Columbians that Indigenous peoples' were not the only ones who signed colonial treaties in this country.

In writing about cultivating the arts of awareness, obligation and consequence (Despret & Muret, 2016; Tsing, 2015; van Dooren, Kirksey & Münster, 2016) with young children, I am reminded of Thom van Dooren's (2015) words in the opening quote to this paper and his assertion that "the histories that we tell are themselves acts of inheritance, they're modes of not just inhabiting, but inheriting the world" (online lecture). This realization has profoundly influenced my research and personal perspectives as well as creating a number of tensions in the process of trying to rethink some of the frameworks I inherited, through which I learned how to view the world and my place in it. As someone raised by somewhat of an unconventional mix of cowboys, artists, farm women, roughnecks, environmental and social justice activists, I like to think I inherited a healthy dose of skepticism toward the status quo aspirations of a consumer society. Having also been raised with the upwardly-mobile, working class sensibilities that whiteness affords in the lucrative, northern Canadian resource extraction economy, I am aware that the threads of racism, heteronormativity, classism, sexism and other forms of structural violence run deep in my particular 'weave'. In a personal sense, learning to inhabit and inherit differently with young children means remembering that, however well-meaning, I am not exempt from the practice of retooling and passing along colonial forms of violence to uphold the patterns of living that benefit particular bodies at the expense of others in this place.

Common worlding childhoods

I draw on a common worlds approach to conceptualize childhood in my work as a situated, plural, and political process of becoming with the world. This approach takes a radical departure from the prevailing Euro-Western approaches to early childhood education, which tend to frame childhood as innocent, universal, and existing in a separate sphere than the one adults occupy. According to the Common Worlds Research Collective (2018):

The notion of common worlds is an inclusive, more than human notion. It helps us to avoid the divisive distinction that is often drawn between human societies and natural environments. By re-situating our lives within indivisible common worlds, our research focuses upon the ways in which our past, present and future lives are entangled with those of other beings, non-living entities, technologies, elements, discourses, forces, landforms. (para. 2)

This conceptual approach feels particularly pertinent for my research and practice in its assertion that we are all embedded in ‘real life’, messy relations with a myriad of others on this planet. As such, taking up this approach pushes me to rethink embedded norms, hierarchies and values that continue to inform prevailing teaching and research practices.

My interest in children’s more-than-human relations is part of a well-traveled path of Euro-Western societal and academic fascination with child-animal relationships. From Roman mythology about Romulus and Remus (Garcia, 2013), to the early nineteenth-century French case studies of the so-called *Wild Boy of Aveyron* (McCance, 2008), to more recent accounts told through the New Nature Movement frameworks (Louv, 2008), child-animal stories have been taken up in a variety of ways to explain and support truth claims about child-animal relationships and what it means to be ‘fully’ human (Plumwood, 2003). Throughout the histories of Canada’s

colonial nation-building project, Indigenous peoples and other racialized groups have been cast as uncivilized and closer to children and animals than the pre-eminent group of ‘white, right, and over eighteens’ whose power and privilege has been consolidated through paternalistic Canadian laws and social mores since the earliest days of bringing the Canadian state to its inception.¹ Donna Haraway (2017) puts it well in saying “[m]ultispecies environmental and reproductive justice must be practiced against human exceptionalism and in resistance to colonial capitalist divisions of species, landscapes, peoples, classes, gender, populations, races, nature, and society. Easy to say; hard to do.” (online lecture). However fraught this work can feel at times, turning away from the cultural norms that continue to produce the dangerous ecological challenges with which we must now contend is imperative and inextricably linked with the wider political project of challenging multiple forms of domination that also reside in early childhoods (Nelson, Pacini-Ketchabaw & Nxumalo, in press; Pacini-Ketchabaw, Taylor, de Finney, & Blaise, 2015).

With these issues in mind, Taylor and Pacini-Ketchabaw (2015) remind us that those of us working in the field of childhood studies are morally implicated within a serious project ahead, that is, of (re)thinking how we are doing ‘nature-cultures’ together with young children. Paying attention to our (albeit messy) relationships with more-than-human others helps prevent despair or paralysis in the face of a continuous barrage of overwhelming images and negative messages about the state of the world. While important to be informed, doom and gloom forecasts for futures can contribute to a feeling of shutting down, which goes against the creation of open-ended possibilities for now and future generations. Translating this work into

¹ Land ownership rights and The Indian Act, with its ongoing paternalistic justifications for managing Indigenous peoples as part of a colonial state paradigm, are two examples of the way settler colonials codify privilege and discrimination (de Finney, Dean, Loiselle, & Saraceno, 2011).

pedagogy and practice in a meaningful way is vital and hugely challenging (Taylor & Pacini-Ketchabaw, 2015). Despite romanticized conceptualizations of childhood as apolitical, creating pedagogy and practicing with young children is, in fact, political work. Life, death, and power-dynamics co-exist here. The children I work with seem to see endless possibilities, which is inspiring to be around. They are also aware of some of the serious risks and challenges facing other creatures, using words such as ‘extinct’ to describe certain animals, or telling me about the wolf cull under way in parts of British Columbia. These are the complex worlds they inhabit.

This awareness requires more than a cursory engagement with the histories and ongoing forms of colonialism, neoliberalism, and other ‘isms’ that have brought us to this particular time-place-way-of-relating, as well as a serious and ongoing effort to reach toward open-ended futures. The application of what I am engaged with is extremely humbling. I am aware that I am merely one part of a complex and much larger whole that is made up of constantly emerging moments with the children, their families, educators, and others in the community from which I can learn, rather than seeing my task as one of simply striving for mastery over any so-called ‘Guiding Principles’ of doing in early childhood education.

Multispecies Inquiries in an Early Childhood Centre

The multispecies inquiry work undertaken at the childhood centre, that is the basis for this thesis, began when the educators I visit on a weekly basis shared their desire to engage in a process of focused, collective inquiry into their relationships with the animals they encounter on a day-to-day basis with the children, as well as learning to care for and with worms who live in the classroom compost bin.



Figure 1-1. "What does it mean to really share a space?" (van Dooren & Rose, 2012)

One of the central questions that has emerged throughout the Cache Creek Early Childhood Centre's ongoing multispecies inquiry is inspired by environmental humanities scholars Thom van Dooren and Deborah Rose (2012), who ask "[what] might it mean to take storied-places seriously as multispecies achievements?" How might paying attention to the work and lives of compost worms, deer, crows, and other animals we encounter provide new perspectives on the world? As van Dooren and Rose (2012) suggest, in so doing lies the possibility of drawing "us into deeper and more demanding accountabilities for nonhuman others" (p. 2) which, as they point out, we are in fact dependent upon for our very existence. In this way, the point of engaging with a multispecies inquiry is to promote a habit of seeing ourselves as part of a wider web of relating, or what van Dooren (2014) refers to as a "fundamentally shared world" (online lecture), which is as Kim TallBear (2015) reminds us, something Indigenous peoples have done for millennia.

Opening ourselves up to relational understandings and deeper accountabilities to those with whom we share place holds potential for helping to break down binary norms such as a nature

versus culture conceptual split that serve to keep non-human lives at an ethical arms-length, eclipsed by the perceived needs of modern, human society. Furthermore, focusing on our relationships with more-than-human-others helps debunk the idea that they are somehow ‘out-of-place’ in cities (van Dooren & Rose, 2012). With the intensification of urban-sprawl and industrial projects in places that exist outside of the urban imaginary (such as the Beaver Lake Cree and Mikisew Cree Nation territories, next door to the Alberta tar sands), the question of how we conceptualize so-called ‘nature spaces’, learn to respect their inhabitants - human or otherwise - and see their lives as proximate and interwoven with our own seems, again, vital to think with in our approach to early childhood education. As such, I align myself with an increasing number of interdisciplinary scholars who argue for a turning away from humancentric theories of relating (Gibson, Rose & Fincher, 2015; Haraway, 2016; Kohn, 2013; Puig de la Bellacasa, 2017; Taylor, 2013; Tsing, 2015). In my work, this means rejecting humancentric frameworks, such as those used to promote connections with animals to save children from ‘nature deficit disorder’ and trying, instead, to cultivate understandings of animal-child connections as everyday community-kinship inter-dependencies within which mutual exchange and ethics coalesce (Blaise, Hamm & Iorio, 2017).

As Pacini-Ketchabaw, Taylor and Blaise (2016) and Haraway (2017) argue, putting moral intentions to work is easier said than done. However awkward stepping outside of the parameters of what is considered to be a normative approach to early learning can feel at times, it is in this vein that I share our attempts to do otherwise through ongoing multispecies inquiry projects. Sharing the messy bump and grind of learning to tell situated stories is an important part of this process too.

In taking a hybrid common worlding approach in my early years research and practice, I rely on a ‘walking-tracking’ multispecies ethnographic methods throughout this project. While the processes of pedagogical narration and critical ethnography stand on their own as methods, I employ them as a supporting dimension in the ethnographic process through which walking-tracking observations might be shared through pedagogical narration and made visible to participants, educators, families, researchers and the wider community (Atkinson, 2012; Pacini-Ketchabaw, Nxumalo, Kocher, Elliot, Sanchez, 2015). I, along with the Cache Creek educational team (educators and researchers), try to take time each week to reflect on moments from practice and share perspectives on what might be happening, and why it matters. This method reflects part of the group’s collective desire to think critically about how we make, reproduce and inherit meaning in early childhood education (Pacini-Ketchabaw, et al., 2015). It includes anecdotal observations of children, plant and animal others, children’s artwork, stories, and ideas, and photographs, videos, and social media (Twitter) posts to illustrate a process in children’s learning and engage a wider public in ongoing conversations about the issues we are working with.

Walking and Tracking as Common Worlding Method

Because the animals we seek to engage with are not always ‘on call’ or visibly present, we go on weekly ‘animal walks’ as part of our multispecies inquiry intention to look for traces that tell stories beyond the settler colonial preoccupations that continue to order this place in particular ways. Misha Myers (2010) describes walking as a method that “brings attention to the landscape... [allowing for] patterns, paces and paths of walking as experienced in the breath, rhythm, sweat and memory of the walker[s]” (p. 59). Following Miller (2005), she sees it as an

‘ideal strategy for witnessing’ and engagement involving “embodied, participatory, and spontaneous modes of responsiveness and communicability...a mode of travel that encourages convivial and social interaction with inhabitants of places” (p. 67). Tracking with young children follows a similar tack. It requires us to attune our senses to something other than the university’s humancentric dominant narratives. Through our tracking efforts we are learning to walk, scan, and ‘move with’ the land’s response to another creature’s passing through. And as we move we speculate about bent blades of grass, depressions in the ground, a pile of poop, and the traces of encounter that hint at the more-than-human stories that also constitute this place. In tracing the steps of animals who have passed through a place before us we must also learn to slow our bodies, adjust our stride, get curious about the trace of a crow’s hopping gait in the mud, or a tuft of rabbit fur left behind in a night’s encounter.



Figure 1-2. Messiness of place: trace, tracks, and other(wise) encounters

For us, tracking with young children also means walking with the question of what it means to share space in this urban setting (van Dooren & Rose, 2012), while figuring out how to engage respectfully with our non-human neighbours who, unlike pets, are free to roam according to their own needs and desires. We started the inquiry project by paying close attention to some

of the crows who congregate to work the grass and concrete gathering area outside the university library where we walk. As often happen with crows and other creatures deemed ‘not so easy to live with’, they seem to have an uncanny knack of showing up when they are not wanted and being absent when we want to engage.



Figure 1-3. Paying close attention to other ways of storying place

Tracking together with the children has become a means through which we learn to pay close attention to more-than-humans who, like us, continue to story this place in their own unique ways. Following Tsing and Haraway and others, van Dooren, Kirksey, and Münster (2016) argue for “cultivating detailed practices of attentiveness to the complex ways that we, all of us, become in consequential relationship with others” (p. 3). They see “passionate immersion” into the symbiotic ways plants, animals and other creatures story place as part of the process of doing so. Cultivating the arts of awareness in this way, that is by paying close attention to the expression of non-human lives as more than static and mechanical beings and

becoming aware of their lives as deeply entangled with our own, feels critical. Small ruptures in the otherwise seamless expanse of manicured lawn, and signs like nests in trees, become points of intrigue and we notice a group of ducks working up a low-lying section of the terrain, beaks buried in pursuit of something we cannot see but can hear as they sift the watery mud. Gulls and crows make an appearance around the fringe of newly formed wallows, poking holes in new sod and hop-flying away when we get too close. With a Saskatchewan provincial field guide in hand, we are clearly not reading for accuracy in this West Coast place.² But in tracking moments we find similarities enough amid animal guidebook discrepancies to keep us scouring the ground for evidence of stories embedded in the earth, in an effort to speculate together about what else might be happening in this place beyond the dominance of Euro-Western understandings.



Figure 1-4. Reading for refusal

By following tracks in what Taylor, Pacini-Ketchabaw, de Finney and Blaise (2015) call

² The centre eventually bought a few BC field guides to use as well.

our colonized and ecologically-challenged lifeworlds we attend to relations that exist both with and beyond our human involvement. Perhaps we are learning to read for refusal, that is, the refusal to be ordered out of existence, or the resolve to persist in a rapidly changing world. Paying close attention to the ability of others to continue and thrive in this heavily governed place feels like an achievement worth celebrating in a time of accelerated mass extinctions. Especially so, in the case of creatures like the local black-tailed deer who tend to be seen as little more than a problem in need of fixing through a process that obscures histories of colonization that created the contemporary urban dynamics with which we must all now contend (Pacini-Ketchabaw, 2012). Using a tracking method to trace red-wiggler life cycles and the effects of pH imbalances in the worm-compost bin has also been a fascinating process, and one that also helps up-end the romanticisms of ‘tracking adventures’ that sometimes creeps into children and animal tracking narratives.

Learning to read for refusal requires us to take more of a humble approach to learning than we might be conditioned to do in a society bent on using ‘progress’ as a metric for measuring value. In early childhood education, Euro-Western notions of progress manifest themselves in a preoccupation with children’s ‘progression’ through the ages and stages of childhood. As a result, there tends to be an emphasis on measuring knowledge acquisition, cognitive and emotional development in the educational systems we create in this society. Perhaps mastering ‘facts’ about animals in these consequential times is less important than paying attention to the way our own ways of worlding narrows or expands possibilities for continued co-existence with others. Davis and Todd (2017) call attention to the violent impact of climate change on Indigenous peoples’ more-than-human kinship connections, saying “people will not simply sit still in the face of ecological destruction, but will move, adapt, and try to find

ways of recomposing with their kin and companion species” (p. 774). Recently, an emaciated Brown Booby seabird was found well out of the range that any guidebook will tell us they live in (Harnett & Kines, 2018). How, if at all, are we creating space for noticing the surprising efforts of other creatures to recompose in a rapidly changing world in our tracking pedagogies? Do we, for example, reduce them to being ‘out of place’ or do we shift narratives to more relational ways of asking ourselves what they, like us, they might need to do to continue living on this planet in community with others? Perhaps, by taking on the obligation of learning with and from animals instead of simply ‘about’ them, tracking can become more than an extension of the Euro-Western colonial desire to capture and define.

It is important to note that while we might be reading for refusal and resolve in this urban place, we are not reliant on this practice for meat, hide, or sustenance in a corporeal sense. This point is particularly salient in a province where, for example, political debates continue to rage online and in the British Columbia Provincial Legislature over the Grizzly bear trophy hunt and wolf culls continue in parts of British Columbia. We also track animals in places that Lekwungen-speaking peoples, who continue to have deep cultural and spiritual ties to the practice of hunting and tracking, were forcibly removed only a few of generations ago.



Figure 1-5. Remnants left behind

In advocating for this method I must ask myself, then, what we are really orienting ourselves to in the process of tracking with young children? Jenny Cameron (2015) is helpful to think with here in her call for researchers to,

[drop] the falsehood of neutral and objective research [in] “taking a stand” for certain worlds and for certain ways of living on the planet, and taking responsibility for helping to make these worlds more likely and these ways of living more widespread...An ethics of research in the Anthropocene therefore means not just foregrounding the realities our research is helping to build, but also attending to how our research methods might help to bring these realities into being. (p. 100)

Consequently, any attempt to measure the so-called “success” of our ongoing, seriously playful methodological experimentation must be understood as more than training innocent settler

children's imaginations to go visiting on these colonized lands. The practice of tracking with young children also requires us to cultivate what Despret and Muret (2016), following Hâche, refer to as the art of consequences. Through tracking engagements, we are committed to reorienting ourselves and our early childhood practices toward undoing the myths of human superiority and homogeneity so embedded in the colonial patterns of living that mark these so-called Anthropocene times. Among other things, we are learning to read the responses of the land and its inhabitants to a rapidly changing world. Whose lands are we tracking on? We are looking for *otherwise stories*, that is those stories that draw us in while defying quantification, learning to read temporalities beyond the now of our own being here (van Dooren, Kirksey, & Münster, 2016). We are learning to read for refusal and resolve in the hopes it will translate into new possibilities for sharing space with others in this place.

Moments Together

During inquiry walks children, educators and researchers think together about our plant and animal encounters. What kinds of relationships are even possible with our 'wild neighbours'? How are the children affected by these moments? What happened here? They share stories about the differences and similarities to/from our feathered friends. For example, they have noticed that, when we are close to a group of crows, at least one of them always sits at a safe distance watching while others come closer to investigate – much the same way at least one of the educators or researchers is always watching the group to make sure everybody is accounted for and 'safe'. We investigate tracks left behind and speculate on what the birds were doing. Along the path, children share information about the area we visit. This is

not just a place of anonymous, random comings and goings. It is a relational place for humans as well as crows, gulls, deer, and so many others who continue to call this place home.

In his book, *Flight Ways*, Thom van Dooren (2014) talks about the need to come to new ways of understanding what a species is about. ‘Scientific fact’ is one way of getting to know another species, but he suggests that focusing on the “time, energy, and labour required to keep successive generations in the world” might also be an important step in getting to appreciate our co-shaping community dwellers. With the children and educators, I wonder how can we might think about the compost worms who live in the centre, or the gulls we regularly encounter who now survive on garbage and worms due to losing over thirty percent of their traditional diet to climate change, in this way too? (Crawford, 2015) How do we account for the resolve to continue as well as loss in the stories we tell with children?

Generations of crows have also been thriving in this place long before the buildings were here. Certainly, the daily lives of these birds have shifted significantly. But they are still choosing to make futures here. What does this say? Not only do they continue to choose to be here, but they carry a big responsibility (cleaning up after humans) that often gets framed as being a nuisance when their timing is ‘off’ (for example, taking food that humans are not quite finished with).

van Dooren (2014) refers to this intergenerational place-loyalty as site fidelity. Fidelity can also mean being ‘faithful’, which I interpret as a relationship to place that speaks to the past, present and future (intergenerational connections) where, on various levels, attachments to place might be considered and reconsidered by creatures in the following way: we have been successful in this place and have memories and stories about this place; we live here now in relative safety and abundance; we believe it will continue to sustain us as a good place to live in

community and raise our families. Site fidelity happens regardless of whether we humans are present or not. Sometimes it happens because we are here, as with glaucous-winged gulls who survive on worms and garbage after losing over thirty percent of their evolutionary diet of shellfish to impact of climate change. It makes me think of the places humans return to every day. Beyond food and water, these places are bound tightly into our daily ways of living through connections of love, death, friendship, recreation, spirituality, safety, memory and hope. I am not suggesting that there isn't a difference in the way place is understood and constituted by more-than-human others. However, I wonder about the possibility of noticing similar shared 'drives' (emotional or otherwise) that root us in places as well as through decisions to continue co-existing.

However, site fidelity must not be confused with an imagined state of fixed and predictable circumstances. Of course, such a state has never existed. Bodies have always moved with and responded to the flux and flow of vibrant lifeworld assemblages, and never more so than now in the face of rapid climate change, extreme weather events, forced expulsions, and other violent phenomena that mark this Anthropocene era. Picking up the term 'site fidelity' here is not meant to suggest a state of calcified rootedness that renders response as a futile endeavour. In fact, one's ability to continue and thrive depends on cultivating an ability to respond to and with the changes that constitute the everyday flow of life. For the purposes of this discussion, perhaps it is more productive to think about site fidelity as a commitment to creating the conditions for life with others, wherever we find ourselves.

The Point of Engagement

The way we notice together in Cache Creek Early Childhood Centre contributes to understanding the places we live in as multispecies sites of co-existence versus human-only space. It also gives us a chance to learn through observation with animals instead of projecting what we know about how, why and where they should live, thereby undermining the hierarchical, so-called Great Chain of Being, that contributed to the colonial understandings of how this place should be ordered, populated and managed (Lesko, 2001). Eduardo Kohn (2013) is good to think with here about the point of engaging with ethnographic methods. As he points out, “[an] ethnographic focus is not just on humans or only on animals but also on how humans and animals relate breaks open the circular closure that otherwise confines us when we seek to understand the distinctively human by means of that which is distinctive to humans” (p. 6).

Again, this thesis is about cultivating the arts of awareness in pedagogy and practice in an attempt to promote new modes of understanding about what might be happening in our multispecies common worlds and our response-abilities within. In this paper, I contextualized my research questions, methods and common worlding conceptual approach within the challenge of opening ourselves up to telling new stories in these Anthropocene times. In paper two, I advocate for a thicker notion of what it means to care with other creatures and not just ‘for’ by foregrounding our ongoing rot relations that demand we learn to care with our food waste beyond the out-of-sight-out-of-mind approach so often perpetuated by recycling ‘solutions’. The third and final paper in this thesis turns to the phenomenon of death in early childhood encounters and the messy incommensurable story of learning to attend care-fully to living with those creatures few want to claim.

This thesis grapples with the question of what it means to practice with young children in a time of accelerated ‘narrowings’. How might we might open ourselves up to notice and learn

from the creativity of other creatures who are also learning to navigate the rapidly changing common worlds we share? What would this require of educators, practitioners and researchers in practice with young children? How might we learn to think together about the not so nice ‘real life’ stories that take place and in which we are often implicated? And, how can we think together about the affect these moments produce for the children of ‘now’ and not the children of tomorrow referred to so often who exist some distant, as of yet, un-lived future? Donna Haraway (2016) refers to as “the accelerated writing of the earth, in accelerated extinctions, and accelerated threats of serious system collapse of all sorts, truly is the situation in which human beings and other critters must figure out how to ask each other how or if to go on” (p. 111). Experimenting with new world-making possibilities here, I believe, requires engagement with more than sentimental notions about a time that never was nor will be. Rather this means opening up space to tell stories that join us in the radical re-making of today and future possibilities with those who unsettle and challenge dominant understandings of our place in the worlds we inhabit.

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Chapter 2 Composting pedagogies: Ecologies of care in early childhood-vermicompost relations

Abstract

This paper explores thinking and doing with a worm-compost bin as part of an early learning multispecies inquiry project in the childhood centre. In it, I foreground rot relations as a generative phenomenon through which to reconfigure understandings of what it means to care for and with other species in early childhood. Drawing on a common worlds ethnographic approach, this paper explores the material consequences of prevailing out-of-sight-out-of-mind approaches to taking care of our food waste. It promotes thinking beyond negative associations with waste and to engage with the affective and transformative possibilities of learning to care for and with those who thrive in our food excess.

Over the past three years Cache Creek Early Childhood Centre children and educators have opened themselves up to new ways of thinking and doing with plants, animals, and landscape forms through a series of focused inquiry projects. Their willingness to do so is grounded in the educational team's commitment to rethink pedagogy and practice through a common worlding conceptual framework, a process in which I am grateful to participate as pedagogista and researcher (Common Worlds Research Collective, 2018). During this time, it has become clear that, while we continue to enjoy working and living amid the beauty and abundance of the Lekwungen-speaking territories, colonial structures and attitudes continue to disenfranchise dominant patterns of everyday living are rapidly narrowing possibilities for richly diverse multispecies communities to continue flourishing on Earth. At times, this realization can feel overwhelming and unwieldy. What does it mean in terms of getting on with the project of living and learning together with young children?

In accepting the unsettling proposition of what is increasingly called a new 'Anthropocene' era, and seeing ourselves as co-creators in its everyday making, I am interested in opening up possibilities for creating more live-able ways forward through pedagogy and practice (Dirzo, Young, Galetti, *et. al*, 2014; Gibson, Rose, Fincher, 2015, p. vi; Pacini-Ketchabaw, 2013; Steffen, Crutzen, & McNeill, 2007; Taylor, 2017). This paper explores thinking and doing with a worm-compost bin as part of an early learning multispecies inquiry project in the childhood centre. While most of our multispecies inquiries are grounded in the practice of walking in a nearby urban forest and university grounds (Haro Woods, *et al.*, forthcoming, 2018; Nelson, Coon, & Chadwick, 2015; Pacini-Ketchabaw, Taylor & Blaise, 2016; Pacini-Ketchabaw, 2013; Taylor & Pacini-Ketchabaw, 2015; Yazbeck & Danis, 2015),

here I discuss the multispecies learning that emerges from a decision to practice vermicomposting within the centre. I focus on how composting pedagogies, and our unfolding relations with the myriad of lives inside the compost bin, might help reconfigure understandings of what it means to care for and with other species. Central to this discussion is the affective figure of ‘rot.’ I am interested in its potential for promoting life-generating connections with(in) early childhood contexts. How might attending to rot in the worm-composting bin help us reconstitute care outside of the anthropocentric frameworks ‘we’ tend to inherit and reproduce in Euro-Western early childhood education and research?

For the most part, worm-compost bins are easy to set up, productive, and require little daily maintenance. The childhood centre’s worm-compost bin has been a generous inquiry companion: its black plastic walls hold a hot bed of activity, capable of transforming leftover food scraps into readily accessible nutrients for the centre’s plants and garden. At times, the children seem fascinated by the worms’ ability to eat and excrete their way through mounds of fruit and veggie ‘waste.’ They recognize their own acts of care, those of feeding and sorting the worms from their castings, as necessary obligations in sustaining new generations of worms to keep the compost-bin going (Puig de la Bellacasa, 2010, 2017). But it is here that the story gets muddled. To whom, or with what, are we obligated? Is it possible to engage with this sort of inquiry project without reducing the worm bin community to what Douglas A. Spalding calls “little victims of human curiosity³”? (van Dooren, 2014, p. 105). If so, what might be required of us in the process? Furthermore, given the seriousness of the times in which we now live, can we care for and with worms, microbes, and children without perpetuating the well-worn habit of

³ After seeing the effect of human-imprinting on chicks in experiments he conducted, Douglas A. Spalding (mid-late 1800s) referred to them as “little victims of human curiosity”.

hierarchical and divisive thinking that helped usher in this newly minted geologic era in the first place? (Taylor, 2017)



Figure 2-1. "With whom or what are we obliged?"

Before addressing these questions, I set the context for this paper by introducing our worm-compost bin inquiry and the figure of ‘rot.’ Inspired by Joanna Radin’s (2015) fascinating take on rot’s ability to “provide epistemologically rich opportunities to conjure up multispecies worlds and with them alternate visions for what it means to be alive” (para. 1 & 2), I reflect on rot’s cultural significance and negative associations in Euro-Western contexts and explain why I am interested in its possibilities as an affective figure. From there, I draw on Maria Puig de la Bellacasa’s more than human reconceptualizations of care (2010, 2017) to think about ecologies of care in our pedagogical worm-compost bin inquiry.

The way we understand care and what it does is consequential. It influences the shapes our commitments take through hands-on engagement where, as Taylor and Pacini-Ketchabaw

(2015) point out, we (humans) are not the only ones shaping the engagements. In her book *Matters of Care: Speculative Ethics in More Than Human Worlds* (2017), Puig de la Bellacasa argues that “[care] is a human trouble, but this does not make of care a human-only matter” (p. 2). But what does it mean to say that “the worms care for us too”, as Cache Creek children and educators sometimes do? As a socio-material construct, care makes some worlds possible and narrow others, a worthy provocation to think with in regards to our own participation in worm-compost worlding practices (Haraway, 2013). What, if anything, happens when we attempt to craft new modes of care-full engagement with young children through our worm-compost inquiry?

My hope in weaving these elements together with moments from everyday practice, is to explore the neglected space (Puig de la Bellacasa, 2010, 2017) of decomposition, or ‘rot relations,’ in early childhood assemblages. I look closely at this often over-looked bio-chemical, socio-political phenomenon to reconsider what it means to care, together with young children, food waste, and a worm compost-bin. Learning to care for and *with* worms, microbes and others in a compost bin, beyond prevailing humancentric approaches in early childhood education, has at times felt easier said than done throughout the inquiry process. However, these times demand more than traditional forms of care promoted through human-centric frameworks and, as such, it feels necessary to reconsider ecologies of care in our inquiry as situated, multispecies everyday ‘doings’ (Puig de la Bellacasa, 2017; van Dooren, 2014).

I rely on a common worlds multispecies ethnographic approach in researching and writing this paper. Common Worlds Research Collective co-founders, Pacini-Ketchabaw, Taylor, and Blaise (2016) discuss this method as one that situates childhoods within indivisible common worlds while working with a “central research goal [of exploring] the possibilities of

learning with other species in a more-than-human world” (para. 2). This method has been helpful to me in tracing dynamic intra-relations in everyday moments between three to five-year old, predominantly settler-Canadian West Coast children, their educators, compost critters, and food waste. In this way, I foreground rot relations as consequential and more than a background for childhood development. For example, rather than working to quantify the (perceived) benefits of our worm-compost bin inquiry on children’s cognitive development, I try to think beyond a strictly child-centred focus by asking questions such as, ‘what might it mean to live *well* with others who thrive in our food excess?’ (Stewart, 2004)

Keeping Worms

After reflecting on a previous attempt to keep a worm-compost bin in an outdoor shed, the Cache Creek educators invite a local compost expert into the centre to show us how to care for approximately one thousand worms (454 grams/one lb) inside the centre. The day they arrive, I am greeted by much excitement: “The Compost Lady is bringing us WORMS today!!!”

There is more to this visit than I imagined. ‘The Compost Lady’ piques curiosities while unpacking the contents of her bag: a giant stuffed earthworm, equally over-sized foam apple core (with a face) named ‘Corey’, and an aerial photo of our local landfill. A large, black plastic bin with leaves, newspaper and a yogurt tin are also part of her assemblage. With the giant worm’s help, we talk about composting and what happens when food scraps go to a landfill. We learn about keeping worms happy and reflect on how they might be different from the pets some of the children have at home: worms need to be fed once each week but mostly left alone.

The Compost Lady tells us that worms are AMAZING. They have five hearts and no ears but can feel vibrations from our voices and feet. Hearing this makes the bin's plastic walls seem thinner somehow. The same divide that allows worms to live inside the centre, creates vulnerabilities too. We need to feed them - certain foods and not too much - and clean the bin approximately every three months or they will die. The children are invited to shred newspaper for the worms' new home, sprinkle a little water on top, and mix in dry leaves while we learn about what each material does in the process of composting. A writhing mass of worms are finally dumped from the yogurt container into the litter to let them start the process of bin transformation.

The first few weeks of getting to know each other holds some trial and error. We learn about the perils of in-floor heating (too warm for worms?) and pH-altering citric acid, among other things. We research 'practical' information, think with theory, share observations, and take a subsequent visit to the Victoria Compost Centre. Everyone is involved in collecting scraps and feeding the worms, but Julia (educator) takes the lead on bin care. Early on in the project, I hear her talking with the children as she opens the lid to feed the worms. "Some of the worms are crawling up the sides and lid of the bin. Their whole world was turned upside down when they moved here. [turns to child] They must be scared. I'd want to know: 'What's happening?!'" I understand why they want to get out of here. Hopefully they'll settle down soon."⁴

⁴ According to Abrahamsson and Bertoni (2014), when starting a bin "worms can be upset by the change of environment, or by the loss of the complex microbial environment that they were accustomed to up until they move into your bin" (p. 127).

The centre may have the worms, but they seem to have us now too. Over time the wigglers become part of the centre's collective responsibility, as manifest through childrens' requests to family members to save certain ("no chemicals please") fruits and vegetable scraps for their compost companions. The worms may thrive within the confines of the bin but their reach is extensive.

Figuring rot

As stated earlier, my thinking for this paper is heavily influenced by the figure of 'rot'. Contrary to popularized depictions of rot as an intensely abject figure, here I refigure rot as a life-sustaining assemblage of decomposition. The way mainstream society tends to conceptualize both rot and childhood creates a sense of unease in bringing them together. Where childhood is associated with positive framings of innocent, passive lives suspended in a fragile state of purity (Taylor, 2013), an array of deeply negative associations are tied to rot. Joanna Radin (2015) details some of these associations in her *Multispecies Salon ABC's* conversation with Eben Kirksey:

In the Western intellectual tradition, rot...[is] associated with waste, what is no longer capable of being saved. To be rotten can be a material state, a fruit past its prime. A moral state. A disfigurement of the soul. Or a social state. A corruption of power.

Rotting both activates and offends our senses. It feels slimy. It tastes, at least to a

human, like something to be avoided. It reeks of death. (Kirksey, Audio podcast, 2015)

Rendered as such, rot sits solidly at the opposite end of the Euro-Western binary-linear scale than the imagined state of purity occupied by childhood (Taylor, 2013). It is hardly surprising, then, that rot seems like something to avoid with young children.

And yet, there is something compelling about thinking with it in early childhood. From my perspective, rot's inability to be 'saved' is part of what makes it so interesting to think with, especially when juxtaposed with increasing calls to save-the-planet. Engaging with decay assemblages, like the worm-compost bin, means coming to terms with the fact that we (humans) are not necessarily the ones capable of doing 'the saving,' at least not on our own. What happens if we amplify its existence in everyday moments with young children?

This shift tugs at the seams of ECE pedagogical approaches grounded in human exceptionalism. "Consciously or not," as Taylor (2017) tells us, "humanist stewardship pedagogies still operate from the premise that humans have exceptional capacities, not only to alter, damage or destroy, but also to manage, protect and save an exteriorized (non-social) environment" (p.6). Feeding red wigglers, tinkering with compost-bin moisture levels, and sorting worms from their castings are, without question, tasks that determine outcomes and keep the compost-bin going. As we are learning, however, our involvement in the process does not translate into absolute control of what transpires inside the bin. Rot-as-decomposition is a humbling figure to think with in this regard.



Figure 2-2 Vermiculture togetherness (image: Nelson, 2017)

While beyond our control, we cannot extricate ourselves from the process of food waste decomposition. Through inquiry obligations, children and educators become enmeshed in the ongoing process of re-creating a home for the worms, maintaining the worm-bin, and adhering to the necessary constraint of leaving it alone for large chunks of time. But, here again, rot's biochemical collective lives and dies beyond our management, in any pure sense of the word. Abrahamsson and Bertoni (2014) argue that vermicomposting (another term for worm-composting) "is about doing togetherness in a way that is neither detached nor engaged" (p. 126). Because of this, they suggest, engagement with the complex process of 'vermiculture togetherness' opens up space for reconceptualizing human-non-human engagements outside of Euro-Western 'either/or' binary logics. Perhaps, in some way, foregrounding the connectivity

sparked through inquiry engagements might help chip away at the conceptual hierarchies that support Euro-western cultural narratives about humans standing separate from nature too.



Figure 2-3 Sympoietic entanglements

The figure of rot I am thinking with here is necessarily multifarious. It exudes ‘sympoiesis’, Beth Dempster’s (1998) term for “collectively producing systems that do not have self-defined spatial or temporal boundaries...[where, information] and control are distributed among components. These systems are evolutionary and have the potential for surprising change” (in Haraway, 2016, p. 61). Just as yeast metabolizes sugar in the ferment of brewing beer (Alba-Lois & Segal-Kischinevzky, 2010), and mold ripens a wheel of cheese, rot is comprised of a lively web of micro-macro relations. As such, it challenges the false sense of autonomy often valorized in the trope of the ‘rugged individualist’ within mainstream North

American narratives. Instead of taking on a singular form, rot radically reshapes its environment in the process of *becoming with* (Harway, 2008). Paying close attention to rot-as-collective-transformation serves as a strong reminder that we are simply one of many components integral to this worm-compost bin assemblage.

Besides increasing the conceptual divide between rot and our human selves, a sense of revulsion toward rot leaves little room for appreciating rot's vital role in breaking organic matter down into an available state for living communities to take up again (Abrahamsoon & Bertoni, 2014; Puig de la Bellacasa, 2015b; Rose 2013; van Dooren, 2014). Through this inquiry, children and educators have come to understand that 'a fruit past its prime' is simply a fruit primed for other appetites: rot-inducing-consuming-fixing bacterial communities flourish in the breakdown of our fruit and veggie waste, producing a swell of microbial life that, in turn, becomes a feast for red wigglers and other 'macro-decomposers.' (Victoria Compost Education Centre, 2017). The tiniest of worm compost-bin lives may not be perceptible to our eyes when we look inside, but their transformative power certainly is. Worm-compost-rot assemblages create lively spaces from seemingly inert material, shifting perceptions of 'waste' from passive to active in the process. (Hird, 2012)

Bin-life engagement also produces a rich sensory affect that supports possibilities for shifting 'waste world' perceptions. An array of sensory intimacies, such as those experienced through a wriggle of worms against our skin, or the earthy aroma of food-scrap-*cum*-worm-castings in our nostrils, helps open up space for new questions and considerations. Feeding fruit and vegetable scraps to the worms brings children and educators' appetites and taste preferences into the rot relations fold as well. In a short period of time (three to four months) fruit and vegetable cast-offs become worm *castings*, which get taken up by the centre's garden plants to

start the process all over again. Here, life and death seem a bit less absolute. What appears inert on the surface, a wilted piece of lettuce for example, becomes re-animated through the process of decomposition. In the same way red wigglers exhibit taste preferences for certain veggie and fruit scraps, we too have preferences for certain vegetables grown in the centre's garden plots, fertilized by the worm's nutrient-rich castings. As Filippo Bertoni (2016) suggests, "[t]he closer we attend to the specificities of the world, the more – almost fractually – does complexity grow and mess with our paradigms, structures and understandings" (p. 51). Hierarchical logic becomes messed with here too, as the imagined gulf between 'human and nature' narrows. And, despite modern attempts to stave off death, there is also no escaping the inevitable: our bodies will ultimately get taken up by the process of rot some day too.⁵ While perhaps not discussed directly with children in our worm-compost bin inquiry, this point does come up indirectly through speculations about why we do not seem to find old worms' bodies in the bin after they die.

Of course, not everyone frames decay with the negative valence, Radin (2015) highlights. As gardeners and farmers well know, our ability to grow food is heavily dependent on the fertile processes of decomposition. Rot literally, and figuratively, teems with complexity. Abrahamsson and Bertoni (2014) discuss the messy, productive and ongoing 'togetherness' of bacteria, vegetation, temperature, worms, arthropods, humans, fungi, and more, as integral to worm-bin composting. In their view, "[wasting], eating, rotting, consuming, transforming and becoming-with are brought together in a variety of ways in practices of composting-with

⁵ While beyond the scope of this discussion, similar arguments have been made about cremated bodies 'living on' via the carbon released into our 'heating up' atmosphere. The point here is that we are *of* the systems that sustain us. There is no 'sitting outside.'

earthworms” (p. 125) . They suggest, that these ways poke holes in the ‘nice,’ romanticized ideals often evoked when conceptualizing humans coming together with other creatures.

The type of ‘rot,’ or compost decomposition, we work with in the compost-bin inquiry is, for the most part, aerobic and not anaerobic. This is due to the structure of the bin, what we add to it, and something called ‘bioturbation,’ a term used to describe “the transformations of soils and sediments caused by living organisms.” (Bertoni, 2016, p. 43). In the case of red wigglers, this involves changing the physical structure inside the bin via their eating, excreting, tunnelling action allowing for air exchange in the processes of decomposition. To put a slightly different spin on Myra Hird’s (2016) paraphrase of Karen Barad’s work, *it matters how rot comes to matter* (para. 20). Rot ‘matters’ in the childhood centre compost-bin inquiry, as an aerated, much less smelly (if at all), non-toxic, life-generating process. This is vastly different than its contaminating, ‘anaerobiotic’ (oxygen-deficient) rot-assemblage-cousin, found deep inside landfills (Appelhof, 1997; Hird, 2016).

Dirty Work

It’s time to clean the bin again. I arrive to see a group of children and educators seated outside around a table that is covered in mounds of castings, and realize how excited I am to be here.

To make a mess together! There is something satisfying and social about sitting around the table together, engaged in the hands-noses-eyes grime of worm care.

In some ways, this project is a leveler. I, ‘researcher,’ learn alongside the children about compost, am less skilled than young hands and arms at shredding long strips of newsprint for bin

bedding, and I acquire a new appreciation for four years-old eyes, which are remarkably adept at picking yellow-brown egg sacs out from the dark grey-brown castings. Like the children, I can't help but react sometimes to the writhe of worm flesh again my own.

Cleaning, or sorting, the bin means getting up to my elbows in worm-poop and working side by side to create a healthy home for the red wigglers with some of the children (who are absorbed in the task of sorting and take little notice of my presence other than to point out an egg sac or shriek when a dropped worm lands on the lid of my coffee mug!). Who knew working in rot and worm excrement could be such an exciting place to be?

Taking advantage of the September sun, we scoop handfuls of worm-laced castings from the bin out onto the table to work with. The exposure drives the worms down, producing the desired 'migration method' effect that Sherri-Lynn (educator) read about. "These are dark worms, not light worms" one child tells me. Concentrating bodies at the bottom of a pile makes for easier sorting, and while we sit in the collective focus of hands and eyes 'on task', we chat:

About technique: "You have to wait for the worm to move to know where it's going." (child)

And vulnerabilities: "Taking the worms out of the bin makes them nervous. Sometimes like when we go to a new place." (educator)

And other things.

Both children and worms seem extra active today:

"Look! He's dancing."

“Haha! The worm is tickling my arm!”

“It’s in my hair!”

The event solicits tears, movement, laughter, whispers and song. One of the educators shares a robin-eating-a-worm song from her childhood, and we realize that we may not be the only ones waiting to seize on the worms’ movement; someone else might be watching us from the nearby trees and bushes, waiting for a chance to get in on this worm extravaganza.

One child finds a partially-eaten blueberry in a pile of castings and looks indignant: “I want one!” Finding bits of food becomes a bit of a game: “Lookit - apple!” “I found an eggshell! I eat eggs too you know.” With the help of those we cannot see (bacteria, molds, and others), worms break down the ‘intelligible’ worlds of recognizable table bits, remnants from ‘the feast,’ to shape future feasts for plants and then animals, human or otherwise, to enjoy.



Figure 2-4 "I found an eggshell!"

The politics of waste-worlding

Learning how to care for and with food waste as part of the worm-compost bin assemblage, connects us to ongoing, local political battles over organic waste flows in the Vancouver Island Capital Region District (CRD). For the past few years, Greater Victoria and Saanich municipal councils have struggled to adequately deal with urban, residential food scraps. ‘Adequately,’ here, means facing up to the consequence of out-of-sight-out-of-mind solutions so often relied on in our society to deal with that which we call waste. On January 1, 2015, the CRD implemented a full ban on organic kitchen scraps at the local Hartland Landfill, in tandem with putting a curbside compost collection program into effect to transport residential organic waste to a local, rural farm/compost facility (Saanich municipal website, 2016). As a Saanich

resident, I remember feeling more than happy to keep our household waste moving ‘elsewhere.’ Not only would this mean I could stop feeding backyard rats via my compost heap, but I could also be part of a ‘green’ solution aimed at extending the life of our local landfill.⁶

Urban organic waste removal is expensive for municipalities to implement⁷, but it is those residing closest to the new, industrial compost facility who bear the ‘living costs’ of this feel-good initiative. Accumulating mounds of decaying compost sparked hundreds of complaints from local residents regarding adverse health-effects created by the new industrial site, including claims of “drowning in a plume of noxious stench beyond almost human tolerance week after week” (Cleverly, 2013). Fueled by political debates and threats of legal action, the decision to truck approximately eight hundred tons of municipal waste per month to another compost facility, fifty kilometres away, was made in an attempt to settle disputes (Cleverly, 2013; Petrescu, 2013). Five other municipalities in the Greater Victoria Area truck their kitchen scraps outside of the city where, after preliminary processing, it is loaded up and barged to across the Salish Sea’s Strait of Georgia to the BC lower mainland for further processing and ultimate use in that area (VCEC, personal communication, 2017). According to a study by Papargyropoulou, Lozano, Steinberger, et al. (2014), forty percent of the food produced in Canada each year is destined for landfills or other waste management programs. They highlight a number of contributing factors to untenable Canadian food production-consumption commodity chains, urging “a fundamental re-think of the current practices and systems in place”

⁶ Other than the organic waste recycled in the childhood centre worm compost-bin, UVic Child Care Services’ organic waste is removed by a private provider and ‘dealt with’ elsewhere.

⁷ According to Bill Cleverley (2014), “CRD staff had recommended awarding a contract for hauling and processing food scraps between April 2014 and December 2015 to Emterra Environmental on the Lower Mainland for \$4.79 million (para. 2).

(Papargyropoulou, et al., 2014, p. 106).

Economies of scale magnify the consequential outcomes produced by flourishing decay assemblages (Evans, 2014). Just as it matters how rot comes to matter, it matters *where* rot comes to matter. Hird (2016) sees paying attention to ‘waste-world-making’ as an effective means for drawing attention to waste’s ability to mobilize microbial relations that breach and expose our unrealistic expectations regarding containment. It seems we can no more contain ‘waste-rot’ trajectories, than our desire to get rid of them.

This lively unruliness manifests itself in other ways too. Pale, spindly shoots spring up inside the bin without a seed being planted, again reminding us that while worms depend on us for food, lively outcomes in the bin are far from within our control or management (Abrahamsson & Bertoni, 2014; Puig de la Bellacasa, 2015b). And discovering a pale, milky slug infestation inside the bin raises questions about who else was hiding in the spinach salad that an educator ate for lunch prior to the remnants hitting the bin. Arguing for a turning away from anthropocentric ways of understanding food waste relations, Bethany Turner (2014) argues for “[a] rethinking of waste, a reengagement with [taste, touch and smell] and the development of a more careful and embodied relationship with our food represents a key way in which an understanding of the points of connections between humans and non-humans can be developed” (para. 6).

Tendencies to conceptualize the plastic bin walls exclusively as something that ‘keeps the worms in,’ negates the compost bin community’s ability to achieve highly complex forms of mutualism, allowing them to flourish in the decomposition of our food scraps in this space. Earthworm scientists refer to the compost bin microbial community as the worms’ ‘external

rumen,' which is similar to the way cows have adapted to utilize microbial metabolic activity to break down grass in their stomachs (Abrahamsson and Bertoni, 2014). Abrahamsson and Bertoni (2014) suggest that "the term external rumen makes evident the importance of other organisms that partake in this process...and...highlights the role of the bin as a digestive tract as a decomposing tool" (p. 130), upsetting 'clear-cut subjectivities' in the process.

Just like us.

It is time to clean the worm compost bin. Again.

Some children are drawn to the hubbub of laying out the turquoise plastic tarp over the table, moving the worm bin, and lifting handfuls of writhing worms-in-castings out onto the table for separation. Others hang back, paying little attention, preferring the block room and playing with friends to sorting worms from their castings.

One child goes back and forth, breaking from play long enough to peer over the worm bin wall to ask 'what?' and 'why?' in connection to the scene unfolding on the table and in surrounding pails. Julia (educator) explains that we need to clean the bin because the worms have eaten almost all of their bedding and the food scraps we fed them.

Educator: Things are getting too wet inside the bin and they are mostly living in their own poop now, which might be good for plants but not good for them. Time to make them a new home.

Child: (staring into the bin with a screwed-up expression) Why would the worms want to live in something they made? (whispers:) Poop?

Educator: (tapping the bin walls) They don't want to. But they have to. They are just like us. They have nowhere else to go.



Figure 2-5 Just like us

Do worms really *care*?

Learning to respond to compost critters' ability to thrive within, breach, and surpass the limits of the worlds we create, and continually co-constitute, brings us back to the question of what it means to care for and with other creatures in unsettling times. Australian artist, Patricia Piccinini's (2006) words come to mind here, as she raises the question of caring beyond the comfortable terrain of 'the predictable,' or 'the settled,' saying, "I am particularly fascinated by the unexpected consequences of the stuff we don't want but must somehow accommodate. There is no question as to whether there will be undesired outcomes; my interest is in whether we will be able to love them" (2006, p. 13, in Haraway, 2010).

Piccinini's (2006) provocation makes me wonder what it might take to unsettle romanticized notions about what it means 'to care for' other creatures? Once established, the worm compost-bin is not very difficult to care for. While there were occasionally small ruptures, and the odd bin surprise, these things pale in comparison to the risk of learning to care for and with large scale rot assemblages, seen in landfill leachate leaks (Hird, 2016) or industrial-sized compost operations (Bell, 2014; Stone, 2016). If there *is* a 'significant difficulty' in our inquiry exploration, it seems to lie in the consequence of anthropocentric framings. Is it possible to put our reconceptualizations of 'care-full' engagements with the worm compost-bin, young children, and our food waste into 'action' through pedagogy and practice in ways that resist positing children at the centre of heroic stewardship frameworks?

Care is conceptualized in many different ways. Puig de la Bellacasa (2017) describes care, among others things, as "a concrete work of maintenance, with ethical and affective implications, and as a vital politics in interdependent worlds" (p. 5). Annemarie Mol (2016) also argues for a political conceptualization of care that "is about being inside the world and handling it and dealing with it and tinkering with it...as a way of getting beyond moral collapse" (in Boyer & Howe, 2016, Audio podcast). Following their leads, I believe that care-full inquiry engagements require us to think with care as a situated, political act of worlding reparation. In keeping with the parameters of this discussion, and turning to the Merriam-Webster definition (2017), I see 'ecologies of care' as influencing forces in creating "pattern[s] of relations between [worm compost-bin-decay] organisms and [our mutual] environment[s]" (Merriam-Webster online dictionary, 2017). With these things in mind, I suggest that remediating care in the neglected space of rot relations, means attending to the assumptions we use, and the stories tell,

in order to shape modes of care with others in early childhood that lend themselves to new ways of thinking and doing together with others (Haraway, 2010, 2016).

Noticing what rot relations ‘do’ with food scraps, and what garden plants ‘do’ with worm castings in inquiry moments, helps remind us that, as Puig de la Bellacasa (2010) notes, “humans are not the only ones caring *for* the Earth and its beings – we are *in* relations of mutual care” (p. 164, in Hird, 2013, p. 108). This point has been taken up by the children in our inquiry, one of whom tells me that “we take care of the worms, and they take care of us!” But what is the difference between care and maintenance? We maintain the bin through menial tasks, and the worms recycle our food scraps, but do they really care for us? What about the ‘caring *with*’ part of our inquiry story?

Puig de la Bellacasa (2017) is, again, helpful to draw on here in attempting to coming to terms with these tensions, in her assertion that “[a]ffirming the absurdity of disentangling human and nonhuman relations of care and the ethicalities involved requires decentering human agencies, as well as remaining close to the predicaments and inheritances of situated human doings” (p. 2). She goes on to argue that getting hung up on conceptual semantics regarding ‘care,’ in her opinion, is not a worthy pursuit:

the point is not so much to translate care into acting – acting is already there in the practices of maintaining soils [and compost, in our case] – or to care about something that was previously known, but to alter existing relations of taking care through alternative modes of affectivity...modest changes in our ethos of living with many others by creating mundane paths for our doings that acknowledge how we are already ordinary companions. (p.170)

Perhaps the key here for early childhood pedagogies is to learn how to ground understandings of multispecies engagements within current hegemonic difficulties instead of perpetuating separate spheres within which innocuous forms of care are imagined to exist (Puig de la Bellacasa, 2017, p. 172). Furthermore, this requires a serious consideration of the consequences inherent in perpetuating anthropocentric modes of care, where care can inadvertently become a conduit to reinforce understandings of ourselves as in control over other creatures.

Can we care *too much*?

At one point in our inquiry, Anne (educator) reflects on rates of worm reproduction, the scheduled feedings and monitoring compost lives, and wonders, “Can we care *too much*? This is not like living in their ‘natural’ surroundings, where they would have predators and have to find their own food. I wonder if we are taking ‘too good’ care of the worms?” Although the bin is, in fact, the red wigglers’ ‘natural’ environment, to Anne’s point a ‘Composting with Redworms’ (Whatmore, n.d.) fact sheet states that “[if] worms have to compete for food, the population will go down. If there is a lot of food available for a time, then worms multiply at a high rate and more young worms then compete with their parents” (para. 3). We are called here into the necessity of care as a ‘doing’ where perhaps difficult decisions sometimes need to be made and we become culpable, non-innocent actors versus inquiry voyeurs. As Martin, Myers, and Viseu (2015) point out, “[care] is a slippery word” (p. 1). Rethinking the way we care with rot relations in this inquiry means recognizing the slipperiness of how we use the word ‘care’ in everyday moments, to justify ends, and hold up ideals. As they write:

Care is a selective mode of attention: it circumscribes and cherishes some things, lives, or phenomena as its objects. In the process, it excludes others. Practices of care are always

shot through with asymmetrical power relations: who has the power to care? Who has the power to define what counts as care and how it should be administered? Care can render a receiver powerless or otherwise limit their power. It can set up conditions of indebtedness or obligation...Care organizes, classifies, and disciplines bodies. Colonial regimes show us precisely how care can become a means of governance (p. 3).

Young children and educators come to care for worms and decay through the attraction-revulsion of slimy twists against palms, the heady smells of ferment at work, witnessing sensitivities to light and vibration, and getting drawn into intergenerational time scales by following the simultaneous flourish of rotting fruit and vegetables and worm fecundity. These things stimulate and affect us. In her lecture on violence and its *modus operandi* Judith Butler (2015) raises the point that “it is not only, or exclusively, the visual apprehension of a life that forms a necessary precondition for an understanding of the precariousness of life. Another life is taken in through all the senses, if it is to be taken in at all” (Butler, 2015). Certainly, the increasing chorus of threats to our own ‘human’ security, as well as the disappearance of other lives and the ecological damage to places we love, point to the critical nature of learning to ‘take in’ other lives in new ways (van Dooren, Kirksey, & Münster, 2016). And, these new ways might mean learning through the restraint of leaving the bin closed or paying close attention to what is happening outside of apparent human self-interest (Pacini-Ketchabaw, Taylor, & Blaise, 2016; Taylor & Pacini-Ketchabaw, 2015).

Rot relations provide us with the added challenge of being unable to care for and with ‘individual’ creatures. Watching food scraps in the bin decay, disappear and become something useful draws us deeper into the ambiguity and liveliness of waste worlds (Hird, 2012). Joanna Radin (2015) describes rot as “a phenomenon to observe the world, but also as a way of

reconstituting the kinds of collectivities that are going to be sustaining. And not in a straight-forward, mechanistic way, but in an affective, relational way.” But following affective relations also necessitates resisting getting trapped in prevailing child-centred approaches that might stall on ‘noticing children noticing others.’ Puig de la Bellacasa (2017), following Tronto (1993), pushes back on attending too much to care within the binary conceptualization of an either/or scenario, suggesting that:

Instead of focusing on the affective sides of care (love and affection, for instance), or on care as work of maintenance, staying with the unsolved tensions and relations between these dimensions helps us to keep close to the ambivalent terrains of care... Staying with these tensions exposes that vital maintenance is not sufficient for a relation to involve care, but that without maintenance work, affectivity does not make it up to care and keeps it closer to a moral intention, to a disposition to “care about,” without putting in the work to “care for”.

Experimenting with world-making possibilities *here*, in an urban, Canadian West Coast childhood centre built on colonized land, requires us to try to push beyond - and is inseparable from - the logics of care embedded within the Euro-Western sense of service, where (settler) humans are positioned to sit at the centre of ‘being served’ through the metrics of productivity (Puig de la Bellacasa, 2015a). I wonder about the possibility of working with the ongoing relations we recreate every day and in fact, cannot escape. Grappling with the relations ‘we,’ in a colonial Canadian society, *can* change, but refuse to, belongs here too.

Decomposing politics

A few children and educators separate the last of the food remnants and castings from the

concentrations lying at the bottom-of-the-bin worms. Sherri-Lynn (educator) and a larger group of children tear long strips of newspaper to make new bedding. This 'menial' task turns political when a child asks what the newspaper says. Sherri-Lynn reads headlines about:

Kinder Morgan decisions,

DAPL debates,

Standing Rock acts of Indigenous resistance...

In this moment, the inquiry intention to think of compost-cum-soil communities as more than resources for our curiosity and benefit moves into a wider political realm. More questions are raised, opinions expressed, while the newspaper resumes shredding. What might paying attention to new, even deeply unsettling, modes of relating that invite discussion about the politics and power inherent in the processes and practices of our ways of relating open up for/with young children in practice?

Composting Ecologies of Care

These times are rife with serious ecological trouble (Dirzo, Young, & Galetti, 2014). Accelerated climate change, flash floods, drought, mass extinction, and devastating levels of air, land and water pollution are just a few examples from a long-list of catastrophes that human and more-than-human communities must now, sadly, and unevenly, learn to navigate with increasing frequency. According to Deborah Bird Rose (2013), feeling grief at the magnitude of such loss and devastation, without abandoning hope, is an integral part of an ethical response. For those of us working in early childhood, responding with hope and resilience is a vital part of our

challenging but necessary obligation of living and working in these times when working with young children. We may be sitting amid the blast of compounding ‘human interests’ but, as Donna Haraway (2010) reminds us, “getting on together is still the task.” (para. 4)

It is critical to remember that the project of getting on together in early childhoods is not a single-species endeavor. In *Beyond stewardship: common world pedagogies for the Anthropocene*, Affrica Taylor (2017) argues for “reframing our human species as just one of many that make and shape worlds together” (p. 2) as key to creating the kind of change that is necessary and capable of meeting the serious challenges at hand. Nowhere does the need to do so become more glaring, for me, than in the realization that diminishing the ability of vastly complex and interconnected communities, or ‘bioplurality’ (Mitchell, 2017), to even *exist* on Earth is a hallmark of the times ‘we’ are creating. If, as Anthropocene narratives suggest, extinguishing possibilities for life is what ‘the Anthropos’ *does*, the impetus to problematize what Taylor (2017), following Stengers, refers to as the “suite of ‘grand narratives that have led to our blindness’” (Taylor, 2017, p. 3), feels even more critical.

A box of domesticated worms may not exactly bring to mind the kind of bioplurality we have come to associate with worlds that ‘need saving.’ But this is precisely the point. They do not need it. Instead, what they require is a tempered sort of menial hands-on engagement that finds little traction in the techno-fix narratives filled with human heroics that we, in Euro-Western societies, have grown accustomed to telling. Like Taylor (2017), Donna Haraway (2016) argues for the necessity of turning away from the ‘dominant dramas’ (p. 55) of Anthropocene, or *Chthulucene*, times. She suggests we stand to benefit far more from following mundane stories in which transformations are partial at best, and humans are but one of many

players involved. It is here that we may suddenly find ourselves bound to those with whom we may think we have nothing in common.

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Chapter 3 Rats, death and Anthropocene relations in urban Canadian childhoods

Abstract

In the Euro-Western intellectual, or minority world, tradition death is often framed as something to avoid in the creation of ‘optimal’ childhoods. Foregrounding a West Coast Canadian early childhood centre’s unexpected encounter with a dying rat, this chapter looks at the role of ethical frameworks in shaping uneasy more-than-human engagements. In it, understandings of childhood and nature are situated within the schism of romanticized narratives and challenges of a so-called new Anthropocene era, to reconfigure encounters at the intersection of life and death as generative in their ability to destabilize the precepts of a humancentric worldview that orders urban spaces and relations in particular ways. Using a hybrid multispecies ethnographic and common worlding approach, this chapter explores possibilities for cultivating new modes of attention to promote expansive approaches to thinking and doing in early learning pedagogy and practice. How might we resist shoring up colonial and other universalizing narratives when death emerges through everyday encounter? What stories help us matter differently as we continue to world with others in this time of rapid change? This chapter proposes tending to multispecies relations, including those considered uncomfortable, as deeply entangled and consequential to open up new possibilities for ethical responses to living and dying together in these troubling times.

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