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Thinking *with*: Relationality and Lively Connections Within Urbanised Outdoor Community Environments

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Abstract

International studies have reported extensively on outdoor learning in bush (Australia) or forest settings (e.g., U.K. and Nordic countries). Yet, limited studies have investigated urbanized environments comprising community facilities and city settings. This study shares early childhood teachers' exploration and engagement with outdoor community settings in Singapore. Innovative practices emerged in response to the community and context in urbanized areas. Transformation of teaching happens during the research study when teachers shift from thinking *about* the local environment to thinking *with*, contributing to creating new ways of constructing outdoor teaching and learning experiences in an urbanized landscape. This study illustrates how teachers exploring the outdoors and thinking *with* places can open up conversations in building lively (and deadly) connections *with* the world.

Keywords: early childhood teacher practices; early childhood education; urbanized landscape; outdoor teaching and learning; outdoor community learning; post-human; place; environment

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1. Introduction

Environmental precarity worldwide is commonplace. Evident in the rise of sea levels, temperatures, and extreme weather events like bushfires and floods, this human-induced state of the environment reflects the lack of relationship between humans and the planet. Disrupting the trajectory of the current state of the environment calls for humans to find ways to build deeper relationships with the environment. Teachers can take the lead in building relationships through innovative practices that transform pedagogy from thinking *about* to thinking *with* the environment. This shift underpins new types of relationships between humans and the planet that influence decision-making and actions that prioritise living well with the more-than-human (flora, fauna, insects, animals, waterways, land) towards positive climate action (Haraway, 2016).

1.1. Relationality and the More-than-Human

Often, human and nature are considered separate, contributing to the lack of relationship between the environment and humans. Challenging this binary of human and nature, researchers offer relational ontologies for humans and the more-than-human to thrive together (Hodgins, 2019; Inoue et al., 2019; Weldemariam, 2017). Hodgins (2019) notes that "by resituating our lives within indivisible more-than-human common worlds, research

and education can (re)focus on the ways in which our past, present and future lives are entangled with other beings, non-living entities, technologies, elements, discourses, forces, landforms and so forth." (p. 4).

This rethinking of the human–nature relationship as entangled creates a shared 'common world' that is transformative and generative (Haraway, 2008; Taylor, 2013). Specifically, the Common Worlds Framework (see Common Worlds Research Collective, 2020) offers a framework to build relationships between humans and the planet with the intent of learning *with* and *from* the shared or 'common' world of the human and more-than-human (Taylor, 2017; Taylor & Pacini-Ketchabaw, 2015).

> Common worlding or the commoning of worlds requires a persistent commitment to reaffirm the inextricable entanglement of social and natural worlds—through experimenting with worldly kinds of pedagogical practice. This means pushing past the disciplinary framing of pedagogy as an a priori exclusively human activity and remaining open to what it might mean to learn collectively with the more-than-human world rather than about it, acknowledging more-than-human agency and paying attention to the mutual affects of human-nonhuman relations (Taylor, 2017, p. 1455).

As relationships between humans and the more-than-human are built in their shared 'common worlds', learning happens (Taylor, 2017). Early childhood practices have been observed to be human-centric, characterised as practitioner-directed by educators themselves, in Singapore (Bautista et al., 2018; Ng & Bull, 2018; Ng & Sun, 2022). This underscores the importance of highlighting relationality in early childhood settings. Relations *with* place and multispecies create the conditions for learning that are active and relational. Examples of this learning are shared in Somerville and Green's (2015) and Nxumalo's (2015) research that enact pedagogy supporting children's engagements with local places while Taylor and Pacini-Ketchabaw (2015) and Nelson (2020) offer instances of children learning experiences with the multispecies. Hamm and Iorio (2020) name how children and teachers responding to the local places create a 'pedagogical contact zone' that constructs ways of doing and generating knowledges that contributes to positive climate action.

1.2. Shifting Teachers' Thinking and Doing

Hamm and Iorio (2020) reconceptualise teaching by thinking *with* the more-than-human and local places. This shift in starting with these ideas recognises the complexity of teaching and learning in relation to places and the more-than-human. It shifts the perceptions of learning *about*—a de-facto action of teaching—to living and learning *with* place and the more-than-human. This then situates teaching as relational. Working with teachers in a regional setting in Australia, Iorio et al. (2017) document relations between primary school children and teachers and the local environment and multispecies. As the teachers rethink their teaching practices, they shift in how they make visible the relationships between the children, teachers, and environment. This shift in thinking and doing moves practice to thinking and doing *with*, transforming and recognising teaching to a relational and complex practice. Hamm and Iorio co-lead a research project (see www.learningwithplace.org; accessed on 22 August 2025) in Australia focused on building deep relationships between humans and the environment, generating innovative teaching pedagogies and the Learning with Place© framework for implementing change. Part of this research includes the Out and About Manifesto (see https://www.goingoutandabout.net/manifesto; accessed on 22 August 2025, or Figure 1) as a way to engage listening and living *with* the local environment, making visible the shift to teaching *with*.

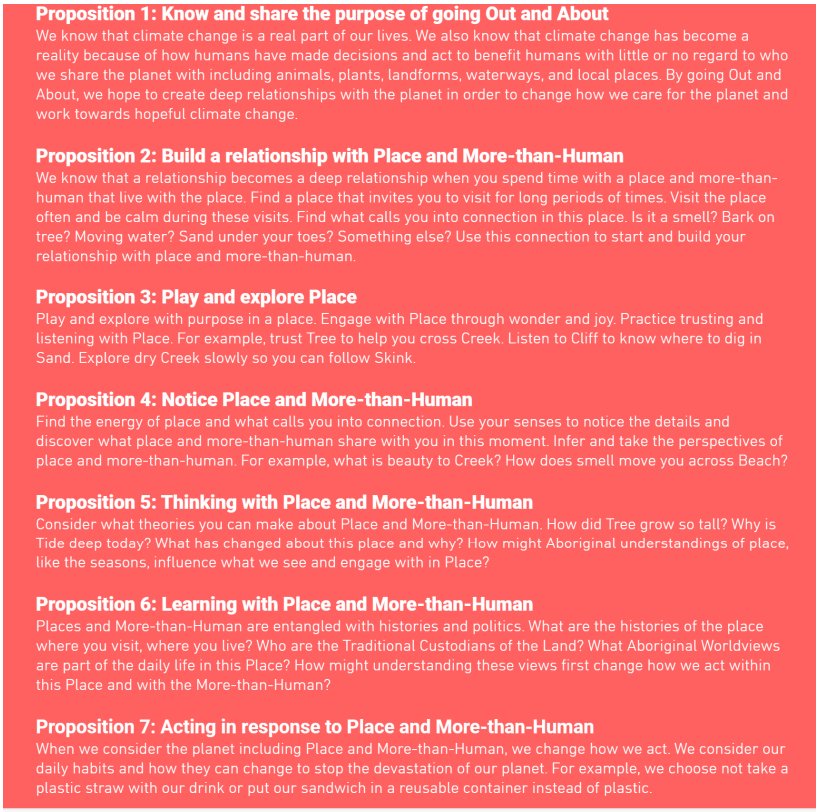

Figure 1. Out and About Manifesto.

1.3. Singapore and Thinking with Local Place

Singapore—the site of the research shared in this paper—is increasingly recognising the value of teaching and learning with the environment. For example, the guidelines for the establishment of early childhood development centres have increased physical activity from half an hour to one hour daily for full-day programs, with half of this time to be spent outdoors (Early Childhood Development Agency, 2020). Additional guidelines relating to outdoor activities, such as staff–child ratio outdoors and frequency of gross motor activities outdoors, were included in the revised requirements for early childhood development centres and programs (Early Childhood Development Agency, 2020). While these measures were put in place mainly to encourage physical activities of young children, they also imply the possibility of teaching that is grounded in building relationships with the environment.

Research also indicates a strong interest in how engaging with the environment can be enacted. Ebbeck et al. (2019) reported that almost half of the Singapore preschool teachers surveyed provided opportunities for outdoor play on a daily basis within school-based settings. In another study, Strachan et al. (2017) investigated the process of how two early educators involved children as co-designers of outdoor learning spaces using natural materials, which provided opportunities for authentic and integrated learning. The two teachers involved in the study expressed how teacher modelling was used as a strategy to facilitate children's engagement, as well as how weekly conversations in a book club with other teachers contributed to the design of the outdoor learning space over time. During such weekly sharing, ideas were gained in adding onto the space ways of developing agreements with children to become responsible users of space were discussed, thereby building up educators' confidence in involving children to co-design the space. Another study conducted by Ng and Bull (2018) noted that early educators facilitate social and emotional learning during outdoor play where learning tends to take place authentically. Tan and Yang (2022) pedagogical documentation as an approach to valuing children's and

educators' agency when engaging with outdoor environment, particularly to reflect on pedagogical understanding. Given that community can be a rich resource for engaging with the local environment in Singapore, as an urbanised landscape, the possibilities of learning and thinking *with* are numerous.

2. Materials and Methods

Responding to the literature and local place, the study informing the ideas in this paper focused on how the more-than-human relations within the community settings in the urbanised landscape of Singapore, play a part in children's outdoor learning through educators' own experiences in the outdoor environment. The research first considered how educators currently plan outdoor learning. Then, by looking into how educators experience the outdoors themselves, allowing for reflections on how they currently view or experience the outdoors through the lens of more-than-human notions. This collective reflection and discussion brings together the more-than-human and the educators' own experiences and understandings as informed by local realities, cultures and knowledges (Arndt et al., 2020).

Participants in this study were six in-service early childhood educators working with Kindergarten One children (aged 4 to 5 years old). Criterion purposive sampling (Cohen et al., 2018) was used to ensure that the sample of educators were working with kindergarten-aged children and in preschools which might or might not have outdoor facilities in their school environments, and that they are interested to make use of outdoor settings located outside the school premises to design outdoor learning experiences. The six educators were employed in four different commercial childcare centres; two were geographically located in Central area, one in Central-Southwest area and another one in North-East Singapore. The curricula in these four centres were guided by the learning domains in the Singapore's Nurturing Early Learners (NEL) framework; one centre also adopts the Reggio-inspired project approach and another centre included Montessori elements. Five participants were female and one was male, ranging from 20 to 30 years of age. Their professional experiences as preschool teachers ranged from 5 months to 10 years 5 months. Their teaching experience in their respective preschools ranged from 5 months to 9 years. All educators held certifications relating to Early Childhood Education with four teachers holding a diploma and two teachers holding a bachelor degree as their highest attained qualification.

Ethics was approved by the institutional review board. Information was explained and presented to the participants regarding this project's purpose, requirements, process, and potential benefits or risks. This information was presented to the educators in the plain language statement and consent form as well as verbally explained when they posed any queries. Prior to the commencement of each recording for the pedagogical conversations, their consent was ascertained. Participants were informed that they were free to withdraw or leave or skip a session or any outdoor involvement if they experienced any form of discomfort or inconvenience. They could choose to participate in parts of the sessions, sharing certain types of data at their own comfort and convenience.

Data collection methods included photography, teacher journal, and pedagogical conversations. Auto-photography as a place interactive method was demonstrated by Cele (2019) to engage young children actively in the places of interest to themselves. The current study adopted photography as a method to depict educators' interactions with their everyday places. Accompanying these photographs as visual artefacts, teacher journals were also collected to capture expressions in words, elaborated in the following sub-section. Teacher journals are used to note the thoughts, observations, emotions, actions and reflections of the teacher, which is an effective mode in obtaining information during the data collection process (Castle, 2020). Aside from portraying their lifeworlds, these

photographs were also later used as prompts in the pedagogical conversation sessions to help participants with their verbal sharing of their lifeworlds. They led discussions among participants in their relational learning and thinking with place. Pedagogical conversation was selected as a data collection method since the interaction among the educators built on their understandings about holistic outdoor learning collectively, while co-creating ideas and learning and thinking with place.

Drawing on post-qualitative ideas, this study analyses and discusses the data that were selected by their power to affect (Bastien-Valenca, 2020), as well as the notion within poststructuralism that "frees us from trying to write a single text in which everything is said at once to everyone" (Richardson & St. Pierre, 2017, p. 1414). Bearing in mind the aims of post-qualitative inquiry are to produce new possibilities to contest the boundaries of common-sense or easy-sense thinking (Brown et al., 2021; Jackson & Mazzei, 2012; St. Pierre, 2011), when "one becomes less interested in what is, and more interested in what might be and what is coming into being" (St. Pierre, 2019, p. 4). This presents a more nuanced alternative to exploring intricate social experiences beyond the typical research methodologies. Ulmer (2017) further described post-qualitative studies as a disruption to the conventional prescription of method, accentuated by the shift from finding out cause-and-effect to exploring elements that entangle, interconnect and flow. Many post-humanist scholars emphasise thinking and being with matters and materials, while moving away from empirical designs which establish causality, reliability and validity (Barad, 2003; Ulmer, 2017). Post-qualitative studies commonly turn towards *crystallisation* as validity (Richardson & St. Pierre, 2017), to uncover the complexities and in-depth understanding of the issue under research. This deviates from the validity where a singular truth is being sought, as typically perceived in qualitative and quantitative studies (Tracy, 2010). Hence, it would be inconsistent to fit the qualitative analyses with their conventional reliability and validity into the current research study that adopted post-humanist perspectives whilst looking into relations and entanglements. This was further affirmed by Ulmer (2017), who highlighted that "more-than-critical methodologies are needed for a more-than-human world" as "knowledge frameworks that privilege the human at the expense of the more-than human could therefore be. . . a potential injustice to non-human entities." (p. 834). Therefore, the post-qualitative approach was considered over qualitative analysis methods with the aim to re-think outdoor pedagogies following post-humanist perspectives which connect with post-qualitative approaches.

Three types of data collection methods were utilised: pedagogical conversations, photograph as artefacts of being with place, and teacher journals. Pedagogical conversations are similar to focus groups which have been identified as particularly useful for gathering qualitative data, understanding a particular field of focus, and generating data from samples of a population (Morgan, 1988). Pedagogical conversations were selected as a data collection method as the interaction among the educators built on their understanding of holistic outdoor learning collectively while co-creating ideas which individual educators might consider adapting to their curriculum and practices. The use of photography as a place interactive method was demonstrated by Cele (2019) and selected as a method to depict educators' interactions with their everyday places so as to uncover their relationality with outdoor community places. Teacher journals were used to note the thoughts, observations, emotions, actions and reflections of the teacher, which is an effective mode in obtaining information during the data collection process (Castle, 2020).

3. Results and Discussion

Following a post-qualitative approach and departing from conventional presentations, this study will share its findings and discussion interchangeably in the same section.

To enact how educators learn and think with place, the findings section presents the educators' conversations of their experiences and encounters with everyday places of their choice whilst engaging with the provocation of the first proposition in the Out and About Manifesto (Out and About, 2019) (see Figure 1) where they pondered upon their purpose of going out and about and made an effort to spend time outdoors in their everyday places. What becomes significant in this process is the transformative shift in thinking by the educators from thinking about to thinking with.

Juxtaposition of the Living, the Dead, and the In-Between

Walking to their workplaces from the nearest public transportation station is something the educators would do every day. This ordinary practice of walking was situated by the research project as a way for the educators to understand and define their relationships with the environment. The stories shared through this experience of walking from public transport to work are shared in the words of the educators as well as Figures 2 and 3.

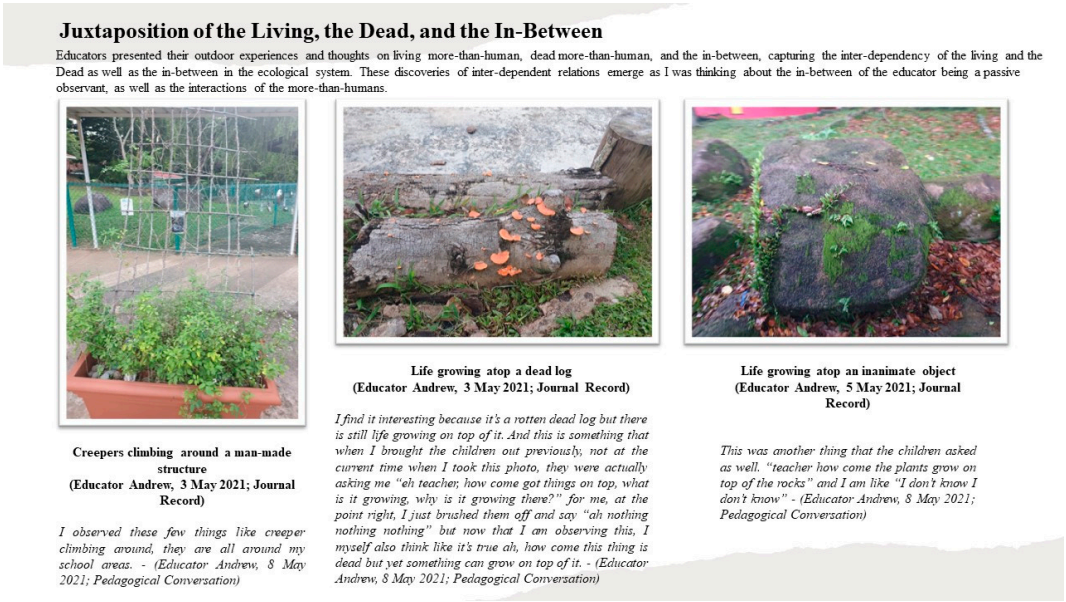

Figure 2. Juxtaposition of the Living, the Dead and the In-Between.

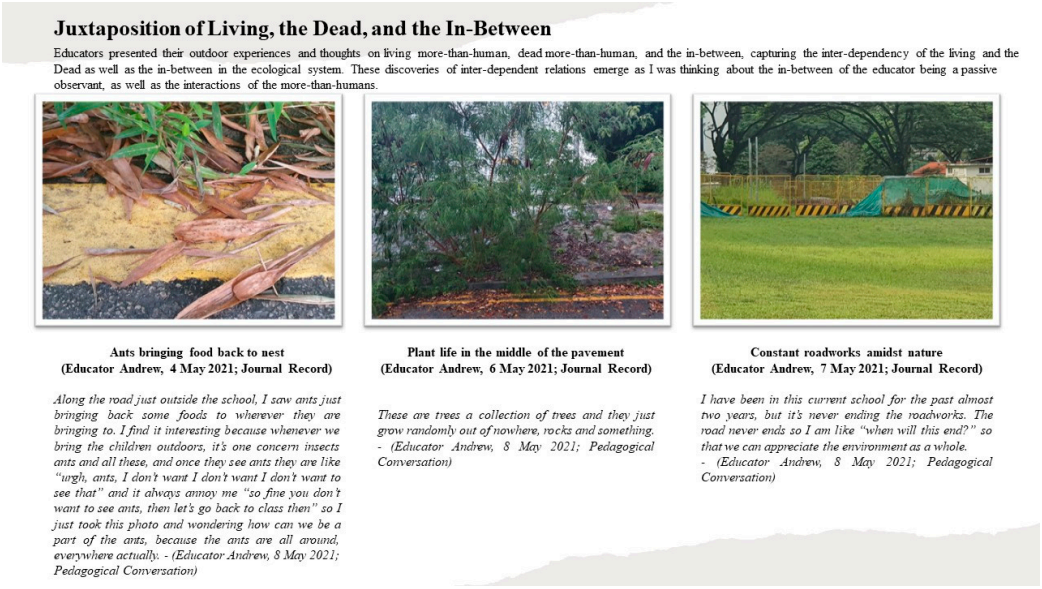

Figure 3. Juxtaposition of the Living, the Dead and the In-Between.

Educator Andrew: These photos were taken throughout the week as I made my way to work. The journey to and from usually takes about 15 to 20 min, i.e., from bus stop to school compound (workplace). Along the way, there were various interesting observations which have been captioned in the next few slides.

Educator Andrew: I took these photos on a daily basis, because it's quite a long walk from the bus stop or the MRT (train station) to our school, and I feel that it's quite an interesting thing to do because previously I used to just walk past without noticing anything. But now because I am given the task to observe and look around more and I start to notice a little bit more and find interesting things.

Educator Andrew begins his walks talking about observation. His reference to observation implies his starting place is in the separation between himself and the environment. Observation in these ways takes on a scientific approach where he sees himself as thinking about. This is further evidenced in his simple naming of what he sees. For example, he notes the 'creeper climbing' and in his response to the children regarding their questions of why something grows on a dead log (see Figure 2). In these moments, the educator is also articulating a beginning relationship with the outdoor environment. Yet, as he continues to walk and begins to document his noticings with his camera, his practices move towards thinking with. This is particularly evident when he starts to rethink his responses to the children—for instance, when he changes his mind and starts to think of why something would grow on the dead log (Figure 2) and when he begins to think of ways he can be with the ants (Figure 3).

Educator Andrew was intrigued to find interesting things in his everyday environment where he "used to just walk past without noticing anything". As Forman et al. (2001) underlined, "focusing on ordinary moments allow us to slow down and be still" (The Power of Peter's Moment section), noticing more in his environment changed Educator Andrew's relationship with his everyday surroundings. At first, he remains distant from the environment and multispecies, identifying and thinking about the features and characteristics of what can be seen, or simply walking pass entities separated from oneself. These can be seen in Figure 2 where he pointed out the creepers, man-made structure and in Figure 3 when he mentioned seeing ants, collection of trees, and roadworks. Through spending time with place, his descriptions and wonderings become more detailed, aware, and meaningful, expanding his thinking (Atkinson, 2012) as he followed the prompts in the Out and About Manifesto (see Figure 1). Through capturing photographs and journal recordings of the participating educators, they make visible these ordinary moments, whether passive or active, to build awareness and knowledge of their everyday places which contribute to their practice of learning. By recording, reflecting, interpreting and making visible the ordinary moments of walking, Educator Andrew creates spaces to invite questions and generate new ideas and knowledge for himself and the children. When educators focus and then reflect on their own ordinary moments, they will be open to more possibilities in making meaning with the world to transform their thinking from thinking about to thinking with.

The recognition of the inter-dependency of a living more-than-human, a dead more-than-human and the in-between illustrates how Educator Andrew begins thinking with. As they started thinking with place, they noticed the interactions or relations among entities. As shown in Figure 2, there was the living creeper plant and man-made structure material; attention was drawn to living mushrooms on top of a log; as well as a living organism noticed to be growing on top of a huge stone. In Figure 3, living ants were moving food matters and gathering amongst some dried leaves; living plants and smaller trees were growing out of cemented pavement and rocks; roadwork materials co-exist amongst living plants. All six photographs captured thinking with through examples of the sensitivity to the juxtaposition of the living and the dead, of which five signalled how the dead or

in-between materials acted as homes for living more-than-human. These discoveries of inter-dependent relations emerged through the in-between of the educator being a passive observer, and then the responses to the more-than-human. These demonstrated how the educators were more aware when thinking with places as they reflected on the meaning of what were observed beyond the mere act of seeing and identifying. Similar interdependency between mushrooms and other species was described in Tsing's (2012) work where fungi build symbiotic relationships acting as companions to lichens and seedlings as well as decomposing dead wood to establish conditions for regeneration. These interdependencies are prominent among more-than-human, though sometimes less visible to or acknowledged by humans. As Barad (2010) reminded us, the relationships between humans and the more-than-human create agency with their entanglements. This leads to a question: How can we bridge this gap between a passive observer and the interactions of the more-than-human? Is the transformation to thinking with that transverse this gap?

This gap could likely be addressed by the work of Osberg and Biesta (2010) as well as Lenz Taguchi (2010) who emphasised adopting a centrifugal approach to aid commencing an inquiry thinking with places that recognizes "the middle of the processes that take place in-between human learners, and in-between learners and material artefacts and things" (p. 19) so as to encourage recurrence in learning, rather than following a linear course with pre-formulated goals. These goals may relate to the notion of teachers needing to be subject expert in knowing the facts of a plant, an animal or phenomenon outdoors, as an educator reflected:

> *Educator Andrew: Sometimes they talk too much and I shut them down unfortunately. But that brings about the point where I said because I am not an expert in this subject matter, so I was shutting them down because I don't know how to answer their questions, but in this instance, I am like I can google this, and these are actually xxx mushrooms and whatever plants then I can share the info with them. After I took this photo (Life growing atop a dead log), that was what I was thinking.*

When thinking with place, they expanded and connected to prior experiences and conversations while building on their noticing and awareness. These expansion and connection involve a shift from a human-centric focus in knowing the facts of what were observed and a teacher being in a know-it-all role, to co-exploring, co-wondering, and co-thinking with places, materials and other entities. In this dialogue, Educator Andrew acknowledged that children's queries were cast aside as he had wanted to focus on providing them with the correct answers—thinking about—(see Figure 2's life growing atop a dead log & life growing atop an inanimate object), as well as another instance when children projected frustration towards seeing ants (see Figure 3's ants bringing food back to nest). In turn, recalling the children's comments in similar situations had enabled the educator to start thinking with by being similarly curious towards the same more-than-human in his everyday environment, highlighting children's active participation with the more-than-human which could have been overlooked by adults in the first instance.

Engaging with his everyday environment and recalling children's prior curiosities extended Educator Andrew's own curiosities and interest to think with the more-than-human in the surroundings, and to bring his own questions and wonderings back into the classroom. By spending time thinking with the living ants, an increase in appreciation towards the more-than-human and curiosity towards how ants and humans are entangled is embraced (Figure 3), de-centring humans as superior beings. This thought of embracing ants, as a result of children who had expressed exasperation, put forth the notion of collective ecology of human and more-than-human for future sustainability (Fawcett, 2002; Hamm et al., 2023). Interestingly, children had reacted on a more positive note towards ants in Taylor and Pacini-Ketchabaw's (2015) study where children who spent time with

the ants calmly and patiently rarely experience negative reactions from the ants, such as being bitten. These embodied exchanges created intimate encounters between the ants and children as both share vulnerabilities of being a risk and threat to each other. In the ant-child encounter, Taylor and Pacini-Ketchabaw (2015) also highlighted an ethical dilemma faced by the children on whether to kill the ants before or if they experience negative reactions from them. In turn, children learn to be responsible for another's life and allow themselves to be vulnerable to one another. In the instance described in Figure 3 by Educator Andrew, the children avoided any encounter with ants, which means that they are avoiding the opportunity to build such intimate connections as well as learning responsibilities and vulnerabilities in their lifeworlds. The reflection from the educator at this point indicates a gradual shift towards recognising humans and more-than-human as equal entities, an integral component to incorporating common world pedagogies in the classrooms. This transformation towards *thinking with* is the catalyst of rethinking teaching and learning that is in relation with the local environment.

In a later pedagogical conversation session, educators extended the related topic on life and death, as they discussed children's reactions to death of class pets amongst themselves. Conversations from the educators indicated how humans think about death and the accompany actions which might influence children's notions on lively connections and death. It came to light that active interaction over passive observation contributes to bonding and possibly leading to thinking *with* the more-than-humans.

> *Educator Bridget: I don't actually know whether they are able to conceptualise how living things feel, like just a simple action can dramatically affect. How do they know that if I do this, then it might die? Do they actually know what death is? I don't know whether this is the best time to introduce this kind of thing. They are still quite young.*
>
> *Educator Andrew: I have pets in class so I remember that the most recent one was the fish, they died one by one. The children understood that it died, it cannot move already. So their thoughts was ok what to do with this? They are wondering will it affect other fish in the tank, so they want to remove it so that the other fish can continue living. After that, they said we can bury it. Then when the last fish died, they were quite upset already, because they were "oh no, now we have no more fish in our class". But then their immediate thing they think is "when can we get another one?" So I don't know maybe to the children they take it for granted that things come and go, maybe these are animals, not friends or humans.*
>
> *Educator Clara: The way adult or caregiver facilitate the way children take care of the pets will make a difference. The way caregiver if they just only feed, if the caregiver doesn't really show how the pet is important or what it can do, then the children will not be able to see it as another member in the classroom, then they will not really treasure it that much as compared to if the caregiver really look after it and play with it more often. So I think the caregiver's role also plays a part in putting importance on the pet.*

Educators shared their experiences of having pets, such as fish, in the classroom, and in one of the incidents when some fish died, the children said to the teacher "when can we get another one?". Educators felt that these could indicate that animals are sometimes taken for granted as things that come and go, which makes animals seem like an object that are easily replaceable by purchasing. Educators also noticed something interesting with the differences in the pets they keep in the classroom. An educator felt that children felt more connected to hamsters as they touch and play with them more often, as compared to fish that they simply watch swim. This indicates that being an active participant interacting with more-than-human, as compared to as passive observer, promotes deeper bonding

between humans and more-than-human. The educators continued this discussion as they shared their difficulties in explaining death to young children.

> *Educator Patricia: Are children in the preschool age able to really process what death is? If so how do we as teachers help facilitate and guide their emotions whether it be consoling or helping them understand that their actions may lead to the death of the animal.*
>
> *Educator Bridget: Even if the pets are gone, or the grandparents have left them, I don't think they are able to understand they are not coming back anymore, I am also not sure how I can as an educator facilitate them to understand that they are not coming back anymore.*
>
> *Educator Andrew: Even after so many years of teaching, I still cannot explain death to the children. Every time I come across something like this, I will try not to remind children of that. Even after so many years, I don't know how to approach this topic of this is gone, it won't come back. For animals, like I mentioned just now, the children were just like "oh we just get another one" to them it's like maybe just the colours different on the fish. It's like ok can buy a new one, get a new one. But if it's for humans, for people, we can't just say "oh, I love my grandmother, I can just get a new grandma" it's not as simple as that, so it's very difficult to explain to them.*
>
> *Educator Clara: One of the experiences I had in my previous school, was when one of the pets died, the teacher gathered the children, at that time the children didn't notice the animals died, and after a while the teacher guided the children to notice that the pets died in the container. And once the children noticed it, they get them to come up with a name for the pet, and went through the process of what should we do next, burying, then where should we bury, and what should we put. So they went through the whole process of digging the hole together, putting rock to mark that spot so that other people will not step on it or touch the area, and they put a signage for the pet also. Then in the following 2 weeks, they re-visited the place, just like how you visit someone who passed away so they just re-visited the spot where they buried and I think it was a nice closure to the children when they learnt that the pets are gone, then it's just like respecting what happened. So it's not an abrupt ending or a sudden loss.*
>
> *Educator Bridget: I am interested to know how parents would react, like if we have a class pet that died and then the children tell the parents "I buried the pets and I visit him once in a while" are parents ok with that? or do we need to seek permission beforehand? or are parents like this is taboo, don't want that.*

During this conversation, educators felt that children showed understanding about the death of humans, but they tended to treat death of more-than-human (animals/pets) differently. Few educators had conducted activities, such as burial, to provide a comprehensive closure to the death of more-than-human, which is an act that would acknowledge death. Butler (2004) wondered "what counts as a livable life and a grievable death" (p. xv), just as Murphy (2021) shared similar sentiments on "what makes some losses worthy of acknowledgment and care while others are so easily dismissed" (p. 148). This acknowledgement is a form of accounting for moral bonds of care and responsibility as well as ethical and spiritual relations amongst multispecies, demonstrating a turning-towards rather than a turning away (Rose, 2013; Rose et al., 2017). Such connections place humans in vulnerabilities as we live and share life and death relations with other beings (Malone, 2018). The death of a more-than-human could provide a vibrant agential role in re-directing children's interests and curiosities, particularly in producing newness and differences of thoughts, emotions and actions (Moss, 2019; Schulte, 2019). Schulte (2019) described some individual and collective shifts in children as they become drawn to the space where a bird died, evoking discussions around memories, experiences, and exploration of life and

death. These discussions offer the rich possibilities of conversing about pain, suffering, loss, death and grief (Russell, 2016, 2017). Children then notice things in a different perspective and learn 'how to be affected' even when it could be uncomfortable and anxious for them (Pacini-Ketchabaw et al., 2016). In this instance mentioned by Educator Andrew that children simply wanted to "get another one" when a class pet died, it suggests that children were not affected by their death when they viewed animals as inferior to humans. Actions from educators are warranted to cultivate this moral bond and ethics for more-than-human, as well as discussing topic of death, as they think *with* local places.

Beyond the typical pets that children encounter, an increasing number of studies investigated these kin-making relations between children and various species (such as ants and earthworms) through the lens of the common world pedagogies (Taylor & Pacini-Ketchabaw, 2015). This focus on relations entangled with multispecies directs our attention to the connection between children and the more-than-human, shifting away from human-centric practices of merely observing children and their interaction (Pacini-Ketchabaw et al., 2016). Death and dying have been uncomfortable and viewed as taboo topics, particularly by early educators who have traditionally adopted developmentally appropriate practices, which Heydon (2009) reported as resulting in avoidance and a null curriculum in this aspect. Moving forward to expand knowledge on lively connections and death, it is vital to consider the in-between as suggested by Murris (2021) in expressing "the idea of life and death as a continuum (rather than binaries or opposites)." (p. 79), which offer transformative insight as one way to thinking *with* the local community settings.

4. Conclusions

By following the provocations in the Out and About Manifesto, educators started to think *with* place and more-than-human; noticing the nonhuman that they would simply have passed by in their everyday environments. Thinking *with* place and more-than-human requires the art of noticing (Tsing, 2015) or place-noticing (Hamm et al., 2023) what influences the enactment of care which involves attentiveness and the ability to patiently wait for an event to unfold (Tronto, 2013). This noticing has been recognised as an integral aspect needing to be cultivated (Tsing, 2015) so as to embark on a multidirectional process of attentiveness and discovery between humans and more-than-human (Bozalek & Fullagar, 2022). Attending and noticing allow for engagement in relational ways when place is positioned as active and agentic, and not dependent on humans to save the planet (Hamm et al., 2023; Taylor, 2017). A key contribution to eliciting these attending and noticing were the rich visual and narrative description boosted by the photographs and captions as artefacts, and the teacher journal records, which were instrumental towards thinking *with* places. When thinking *with* place, more equitable relations within these entanglements can then be promoted to become the catalyst for decision-making and actions to care for places (Hamm et al., 2023). Nature is then being valued on its own, instead of appreciated for the benefits or impacts it brings to humans, which then place is being viewed as *able*. Generating authentic relations deviate from the seeming narratives of seeing local places as merely spaces to play outside, and help to create the basis for complex thinking and actions (Hamm et al., 2023). A limitation of this study would be the lack of the researcher's voice amongst the assemblages which would contribute to more details in how the researcher had contributed or influenced the educators' noticing, attending, and thinking *with* places. This was also recommended by Aagaard (2021) to position "human researcher right back into the research assemblage and acknowledge that what they do affects every step of the research process" (p. 318). Nevertheless, the researcher had introduced these novel explorations to educators as they think *with* place to build authentic relations with places which open up conversations to other topics on what influence relationality.

Relationality can be seen in the encounters to cross the human/nonhuman binary in building relations with place and other species. These encounters contributed to thinking of place as *lively*, which was a concept we had explored in our conversations through Blaise et al.'s (2017) article on 'Modest witness(ing) and lively stories. . .'. Accentuating the interdependency between human and nonhuman, highlighted in the encounter of living plants among lifeless materials, is one way to reconceptualise lifeless materials and place as *lively.* Thinking of places and materials as lively, as opposed to objects, recognises their relations with humans as mutually formative (Hodgins, 2019). Lively connections with more-than-human were observed in children's encounters with sticks with a combination of touching, linking, and responding amongst other actions in relating with the lively impermanence of sticks (Rooney, 2019). In similar ways, educators' encounters with local places demonstrated their lively connections with more-than-human as they had recognised the in-between these living and dead matters, paying attention to contrasting elements, engaging in process-walk and place-sit. Such acknowledgement and explorations helped to re-examine the care and ethics towards seemingly dead matter or matters which are not visibly seen, in order to re-think matters to be beyond object or tool, so as to promote sustainable understandings, and thinking *with* our worlds.

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