

## The Rupture: Transformation towards Posthuman Pedagogy

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"We will go onwards in a different mode of humanity, or not at all" Val Plumwood, eco-philosopher (2007, 1).

### Introduction

This article explores the possibility of positive learner transformation through experimental posthuman pedagogy, by thinking-making-doing a walk in-companion (Springgay and Truman 2017), inspired by the perspective of Isserley, an alien in the novel *Under the Skin* (Faber 2000). The experimental posthuman pedagogy welcomes the possibility of transformation held within the Affirmative Ethics of Joy (Braidotti 2018) and the possibility of transformation held within the hero's journey (Campbell 2008), repositioned as the cyborg's journey of speculative fiction. The cyborg is "a figure of hybrid interconnection that grounds technology into its earthly environment" (Braidotti 2022, 214). Catalysts for this experiment in posthuman pedagogy are the twin catastrophes of the Covid-19 global pandemic and the climate emergency, springboards for a line of flight, a rupture that enables an opportunity for positive transformational change in education. Posthuman pedagogy may change our relations with the Earth, animals, and technology to open our thinking to becoming with the human and non-human. Covid-19 and the climate emergency reveal the interconnections between humans, animals, plants, technology, the environment and the vulnerability of life on Earth (Tsing et al. 2017). It's an intense time to be alive.

This article responds to Snaza et al.'s call for experimental pedagogy towards a posthuman education: "We call on curriculum scholars to explore experimental pedagogical and institutional practices that displace and dispose of humanness as their presumed ground or anticipated outcome" (2014, 51). The posthuman critical theory and posthuman feminism used in this article stem from the work of Rosi Braidotti's trilogy: *The Posthuman* (2013), *Posthuman Knowledge* (2019), and *Posthuman Feminism* (2022). Exploring the possibility of positive transformation through a walk may benefit teachers and learners as they navigate learning through the difficult and anxiety-inducing seas of the post-pandemic classroom, and our increasing awareness of the damage of the Anthropocene on our planet. Our current era of the Anthropocene is "when the Human has become a geological force capable of affecting all life on this planet" (Braidotti 2013, 5). With a sense of urgency, let us turn our thoughts towards an affirmative education for the world to come. Why? Because "the future is literally right here and now and consequently there is no time to waste" (Braidotti 2019, 64). Despite the despair, uncertainty, anxiety, and fatigue that the Covid-19 pandemic engenders, can we hold hope for the chance to imagine the world anew? Re-imagining an affirmative world holds synergy with the UNESCO futures of education initiative, which notes: "[I]t is evident that we cannot return to the world as it was before" (International Commission on the Futures of Education 2020, 3) and looks at learning to become *with* the world, despite the environmental and ecological challenges in the era of the Anthropocene.

It is not surprising that learners are increasingly worried about how the climate emergency will impact their future, alongside navigating a path to safety through the Covid-19 fall-out. In response to the climate crisis, eco-feminist Val Plumwood's prophetic request to imagine new ways of living with the Earth resonate, "We will go

onwards in a different mode of humanity, or not at all" (2007, 1). Education researcher, Rachel Bolstad (2020) points out that education has a role to play in our response to the climate crisis, but as yet there is no clear guidance for schools on how to provide this role. Perhaps education can be a site of hope (Birdsall 2020) where we can imagine alternative ways of living with the Earth and perhaps some solace may be gleaned from interconnectedness with human and non-human entities in a posthuman pedagogical approach.

There are three parts to this article. Firstly, the possibility of transformation via Affirmative Ethics, using the concepts of mapping cartography, defamiliarisation, becoming, and the transversal alliance between human and non-human others. The transformation held within Affirmative Ethics and the cyborg's journey create new possibilities for posthuman pedagogy and the creative figuration of the Posthuman Learner. Secondly, exploring the science fiction text *Under the Skin* (Faber 2000) we are inspired by the protagonist, Isserley's sensitive perception towards the shimmering beauty on Earth, as she manifests a deep enchantment with the world. Thirdly, embodying Isserley's alien perspective encourages a local lockdown walk-in-companion enabling sympogogy, liminality, posthuman pedagogy and transformation through difficult times.

### **Transformation via Affirmative Ethics**

Posthuman critical theory allows for a relational approach through the process of an ethics of joy or affirmation (Braidotti 2018). What is an ethics of joy? Joyful ethics is neo-Spinozan in that it acknowledges the shared life force within all entities and "posits all subjects as differential modulations of a common matter" (Braidotti 2019, 221). Posthuman subjectivity is process-oriented, relational, nomadic, trusting in the world and encourages interactions between humans and non-humans. The life force of the subject contains desire or *conatus*, the desire to sustainably continue. Any negativity, such as the pandemic, is a "blockage that often comes as a result of a hurt, a shock, an act of emotional violence, or [even] intense tedium" (Braidotti 2018, 222). Negativity decreases the subject's relationship with the world, preventing the experience of interdependence with human and non-human others, which is the key to affirmative or joyful ethics.

The Ethics of Joy does not discount pain or suffering, but rather acknowledges disempowerment, allows for difference, and recognizes it "positively, so as to enact the transmutation of a negative relation into an affirmative mode" (Braidotti 2018, 222). There is hope that negative relations may be recognized and transformed into affirmative ones in the present moment through micro-actions. The present moment is "multi-faceted and multi-directional... *what we are ceasing to be and what we are in the process of becoming*" (Braidotti 2019, 64). By mapping a cartography of the present, points of resistance are identified for possible transformation through a collective practice of change. Braidotti notes that cartographies, "record not only what we are ceasing to be but also what we are becoming. They point to affirmative alternatives" (2022, 238). We can hold the dynamic view that the pain held in points of resistance can be depersonalized, defamiliarized and transformed which allows for the process of becoming. Defamiliarization enables us to step back from dominant, familiar habits of thought to seek creative alternatives. Braidotti notes that "[T]he ethics of joy is thus at heart a process of becoming... brought about creatively by a qualitative leap of collective practice and ethical imagination" (2018, 223).

## Becoming Posthuman

In response to what we may be capable of becoming in the present moment, Braidotti notes: "becoming posthuman is regulated by an ethics of joy and affirmation that functions through the transformation of negative into positive passions" (Braidotti 2013, 194). Becoming posthuman enables the transversal alliance of human and non-human and allows for the creative figuration of the Posthuman Learner (see diagram below). Using the ethics of joy we can explore how an affirmative lens may transform *potestas* into *potentia* within the praxis of pedagogy and through the medium of literature to conduct experimental research worthy of our times. Examples of *potentia*, affirmative expression or "the transformative and subversive face of power" (Braidotti 2022, 43) and *potestas*, "the dominant and restrictive face of power" (Braidotti 2022, 43), such as obstacles that diminish the capacity for relations with human and non-human others, can be found in stories. Ideas from these stories can then be explored through posthuman pedagogy, inspiring learners with ways to transform negative relations or blockages in their lives. Roberts writes that "[L]iterature focuses on the particulars of ethical life; on the messy realities characters must negotiate as they make their way in the world" (2018, 32). Stories grapple with emotions such as despair, uncertainty, anxiety, and fatigue in the safety of a container-like structure, with a beginning, a middle and an end. The narrative may offer readers and viewers the inspiration to transform their own entrapment, *potestas* into empowerment, *potentia*. Such a transformative process can be developed into posthuman pedagogy that supports an affirmative education for a world to come.

Posthuman pedagogy allows us to look beyond the dominant Western European Humanist view held in education, to include indigenous, feminist, non-hegemonic ontologies and epistemologies (Snaza et al. 2014) as part of the transversal alliance. The transversal alliance de-centres the human encouraging relations with non-human others, celebrating the life force in all. We, terrestrials, all living entities, are interconnected as we share our planet, Earth, and form a transversal alliance. Braidotti explains our shared intimacy as, "'we'-who-are-not-one-and-the-same-but-are-in-this-together" (2022, 8). This 'we' includes the non-human, "in *this* troubled world, in this painful moment, *together*" (Braidotti 2022, 241).

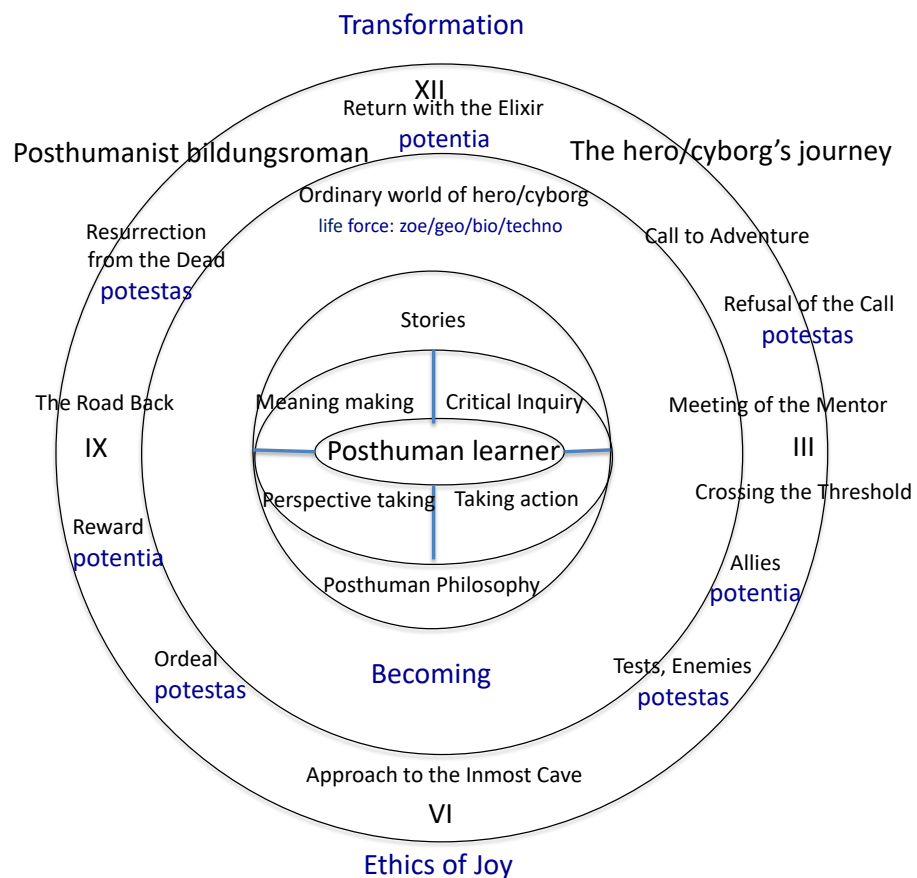
The various allies and companions (Haraway 2016) found in stories connect to Braidotti's notion of the transversal alliance which acknowledges that 'we', geo-bio-techno, are becoming world together. A vital interconnection with a multitude of human and non-human others, where difference is positive, and not viewed as 'less than' a dominant norm, this 'we' of geo-bio-techno is inclusive of the life force of the Earth, humans, non-humans, animals, machines, minerals, planetary forces, even the cosmos. This is a significant shift in perspective for curriculum designers and educators to consider, as education is traditionally a field that favours human exceptionalism rather than explicitly including non-human others.

## Transformation via The Cyborg's Journey

Stories and the circular hero's journey (Campbell 2008) reimagined as the carrier bag (Le Guin 2019) or container of the cyborg's journey may support learners on their learner's journey, by encouraging them to face their fears and anxieties with resilience (Pascoe 2018). The hero's journey (Campbell 2008) is a three-act framework for stories. In Act One a character in their ordinary world is called to adventure. The character may refuse the call, but often due to an external push, crosses the threshold

and meets the mentor. In Act Two the character meets allies and enemies and takes tests. After facing a large ordeal, and overcoming a crisis, the character receives a reward, perhaps making new alliances. Act Three explores the road back to the ordinary world. On the way the character may be resurrected from the dead, and returns with the elixir, transformed. The interplay along the continuum of *potestas* and *potentia*, play out as restrictive and transformative faces of power as the hero/cyborg overcomes challenges towards joyful rewards. The various stages of the journey are written around the outer circle of the Figuration of the Posthuman Learner. The figuration is a visual diagram that maps the cyborg's journey and the possibility of transforming *potestas* into *potentia*, through the Affirmative Ethics of Joy, interconnected with the life force that lies within the transversal alliance of the human and non-human; the 'we' found in the geo/bio/techno (Braidotti, 2013, 2019, 2022), becoming Posthuman Learner.

### The Figuration of the Posthuman Learner



In the figure above, the Posthuman Learner sits at the centre, the iris of the eye, the middle of a labyrinth surrounded by concentric passageways, reminiscent of a stone thrown in a pool of water, causing the rippling out of circular waves. The Posthuman Learner is in the middle as, “[R]esearch begins in the middle... the middle is where things grow, expand, and pick up speed” (Springgay and Truman 2017, 206).

The second ripple of the Figuration of the Posthuman Learner shows the capabilities of meaning making, critical inquiry, perspective taking and taking action. Capabilities are what a learner “can do-and is willing to do-as a result of their learning” (Hipkins 2017, 1). Capabilities are enacted in a coherent curriculum (Hipkins 2017), they are embedded across learning areas allowing for an integrated approach to education. These capabilities may be fostered through the affective interactions,

dynamic relations and transpositions (Braidotti 2006) across space and time within speculative narratives that explore the transversal alliance, the posthuman 'we' becoming world together in the non-linear present. Braidotti refers to transpositions as "creative and highly generative interconnections that mix and match, mingle and multiply possibilities of expansion and growth among different units or entities" (2011, 233). Braidotti notes that the term 'transpositions' is inspired by music and genetics and indicates an "intertextual, cross-boundary, or transversal transfer" (2006, 5). More than a variation on a theme, transpositions play with "the positivity of difference as a specific theme of its own" (Braidotti 2006, 5). To help us understand this concept, Braidotti (2011) compares transpositions to a painter that captures the essence of a landscape, its light, energy, or essential lines. Rather than being superficial it is a qualitative leap towards *potentia* and the liminal flow that "express the vital energy of transformative becomings" (Braidotti 2011, 235).

The outer hub of the Figuration of the Posthuman Learner is the cyborg's journey. The cyborg character may engage with multispecies ecologies through relational encounters which decentres the human, enabling what Carol Taylor names a posthumanist bildungsroman (2017) or process of formation. The cyborg or protagonist of a narrative encounters adventure, opportunities, internal and external challenges, meeting a mentor and allies on the path to becoming and transformation. Literary art can promote identification and powerful emotional reaction from the reader/viewer (Nussbaum 1995). The transformation held within the cyborg's journey may be lifted from speculative fiction to co-create a map for the learner's journey. Perhaps by interacting with texts, high school learners may build capabilities to navigate their journey(s) of growth, transformation and becoming (Pascoe 2018).

Mapping the cyborg's cartography allows identification of points of resistance, entrapment, *potestas* or challenges and ordeals and the possibility of empowerment, *potentia* through the support of allies and discovering rewards on the journey of becoming, before the cycle starts again; the snake's mouth opening for its tail. As philosopher Donna Haraway notes, "[i]t matters wherehow ouroroboros swallows its tale, again" (2019, 10). Author, Ursula K. Le Guin is interested in the continuing process of the life story. The possibility of empowerment, *potentia*, links to Le Guin's view of a narrative as a bag, a container: "the natural, proper, fitting shape of the novel might be that of a sack, a bag. A book holds words. Words hold things. They bear meanings. A novel is a medicine bundle, holding things in a particular, powerful relation to one another and to us" (Le Guin 2019, 34). The relational encounters within a cyborg's journey through a narrative, may connect with us, the readers and/or viewers and our learning journeys through life. Thus, the transformation of a character may inspire the transformation of a reader or a viewer, enabling an ongoing process within our own life stories. The Figuration of the Posthuman Learner demonstrates the possibility of transformation via defamiliarizing *potestas* or obstacles and seeking help from allies to enable *potentia*, enabling the ceasing to be of entrapment and the process of becoming.

As an example of the possibility of transformation through seeking help from allies to overcome obstacles, consider Dorothy, a cyclone-survivor, a small human girl who with her dog as a companion sets forth on a yellow brick road in the wonderfully strange and unfamiliar land of Oz to find her way home (Baum 1900). On the journey she meets and makes friends with a scarecrow (geo), a tin man (techno) and a lion (bio). Together, through their different perspectives, they offer each other support to overcome scary encounters. Dorothy is a fish-out-of-water, in another world; her defamiliarizing experience offers opportunities to befriend new non-human friends.

The geo-bio-techno of their alliance enables creative problem solving, as they develop the curiosity, compassion and courage to realise they knew the way home all along. Dorothy learns that friends can be made of straw, metal or be animals and that problems are best overcome working as a team. This is the path of 'becoming' as exemplified in the hero's journey (Campbell 2008) repositioned as cyborg's journey. Cyborgs have a tendency to rebel and may herald a call to action, for the collective to reshape their connections with one another and to stand in solidarity against oppressive and coercive power. This process of becoming is positive as it suggests that we can grow and learn in relationship with ourselves, with others and with the world we live in. Our world which is facing existential crisis demands a shift in focus - from the individual to the individual in relationship, allowing for a shift from Humanism to Posthumanism.

## **Sympogogy**

As a response to widening the lens of education to include a human and non-human alliance, Alicia Flynn initiates the neologism, 'sympogogy' to name the educative praxis of learning-with the world through stories. The term is a springboard from 'sympoiesis', Donna Haraway's (2016, 58) relational process ontology of 'making-with' the world. Sympogogy makes a break from social constructivist educational ideas of "individual human-centred developmentalism" (2021) to make room for affect as a relational process of learning to become with the world expecting difference and acknowledging the life-force in all. The meaning of the word is broken down thus: Sym = with, together; as in sym-biotic; -po (from poiesis) = making; -gogy = learning, wor(l)ding, storying. Sympogogy connects to an expansive and inclusive orbit, with the posthuman logic of entanglement, a non-dualistic "ongoing relational process of 'worlding'" (Taylor 2018, 87).

Let us explore learning to become with the world through the novel *Under The Skin* (Faber 2000) where cyborg heroine Isserley's journey and experience, in relation to the life force of her environment, may act as a transpositional springboard which inspires learners and their becoming, making-with the world. Just as Isserley loves walks in nature, so might teachers take learners on walks in nature, interconnecting with a character in a narrative, their environment and each other.

### **Isserley: a cyborg character**

Isserley, our hybrid heroine in *Under The Skin* (Faber 2000), is alien, sent to Earth, Ablach farm in Scotland, to harvest Earthling human meat, by picking up male hitchhikers in her old car. She takes up this job as a means to escape the entrapment and *potestas* of a life working in the underground oxygen pits, the polluted bowels of her home planet. Isserley is cyborg. The definition of cyborg, for the purposes of this article, is drawn from Braidotti: "a figure of hybrid interconnection that grounds technology into its earthly environment" (2022, 214). She has a sensitive perception and deep appreciation of nature and the beauty of Earth: "Outside, the sky was blue, transparent and without upper limits. Millions, billions, maybe trillions of trees were making oxygen without human intervention. A newly mature sun was shining" (Faber 2000, 122). Becoming with the world and drawn by the allure of beauty in nature, she can be distracted by: "A luminous moat of rainwater, a swarm of gulls following a seeder around a loamy field, a glimpse of rain two or three mountains away, even a lone oystercatcher" (Faber 2000, 2). Isserley is entranced by planet Earth, having escaped the pollution of where she was born.

Her journey to Earth is not without personal sacrifice. She no longer has her luxurious pelt or her fifth limb, a powerful tail. She has undergone painful and severe body modification to emulate female Earthling human form. However, she is grateful for the opportunity to breathe the clean air of Scotland where she now resides. Monstrous, alien and weird, Isserley is elsewhere, she does not fit into a normative framework. Cyborg, a porous boundary between human and non-human, hers is a hybrid, alternative bodily configuration, a liminal existence. Throughout the speculative fiction narrative, Isserley's journey is one of becoming as she learns to make peace with her situation, no longer harming humans, finally becoming imperceptible. Braidotti notes that "becoming has to do with the emptying out of self, opening it out to possible encounters with the "outside" (2006, 145). I consider Braidotti's concept of becoming, in particular during the time of living through the pandemic and climate crisis, which holds closer the threat of death. Braidotti explains becoming imperceptible:

to disappear by merging into this generative flow of becoming, the precondition for which is the loss, disappearance and disruption of the atomized, individual self... the moment of ascetic dissolution of the subject; the moment of its merging with the web of non-human forces that frame him/her, the cosmos as a whole (2006, 136).

Becoming imperceptible, merging with the transversal alliance available within nature brings a strong sense of joy, a possibility, beyond that which Isserley had hoped. Isserley captures the outside world through her posthuman alien lens, her sensitive perception inspiring us to see our world anew. By exploring the viewpoint of an alien, the text provides readers and learners with a fresh way of viewing the interconnected relations within planet Earth and beyond, joining with animals, machines, nature, the cosmos. Incorporating such stories into a learner's journey may offer hopeful inspiration as to how we choose to go onwards on planet Earth. Education researcher, Rebecca Christ holds that, "education has the potential to change not only what we know about the world but also *who we are* and *how we live* with/in the world by attending to the entanglement of humans, non-humans, and more-than-humans"... so we can "(re)consider our response(abilities) to each other (other humans) and the world (including non-humans and more-than-humans)" (Ulmer, Candace and Christ 2020, 5). Perhaps education that embodies sympogogy (Flynn 2021), learning-making-with the world, may inspire humans to go forward differently, with peace and care for non-human others on our withering planet in response to the urgent challenges facing us all. The notion of liminality is a concept that offers solace to the uncertainty of our times, because while acknowledging the dangers, we, the collective of the transversal alliance can also look for the opportunities.

## **Liminality**

Liminality and the blurring of boundaries may assist the defamiliarization process by enabling us to step back from dominant, familiar habits of thought to seek creative alternatives.

A liminal state is an uncertain space of both danger and opportunity, essential for growth and education because it provides for new possibilities, creativity and openness to the future. An interest in liminality by definition entails an

interest in boundaries and borders between forms of knowledge. We take liminality to mean awareness of margins and thresholds of knowledge. It may involve stepping up to, stepping beyond or stepping back from those thresholds (Stewart, Devine and Benade 2021, xii).

As an expression of liminality, we can explore affirmative ethics of posthuman critical theory and the cyborg's journey allowing for a possible transformative transposition into the lives of learners.

### **The liminal walk as posthuman pedagogy**

Isserley embraces liminality; she explores the liminal threshold of where the sea meets the land, enjoying a walk along the shoreline. This walk provides great solace and comfort to Isserley, for although she has escaped her polluted planet, she remains entrapped, caught in the *potestas* of her male-dominated working environment on Earth.

*Isserley walked along the pebbled shore of the Moray Firth, drinking in the beauty of the great uncovered world.*

*To her right, trillions of litres of water surged between Ablach's beach and an invisible Norway beyond the horizon. To her left, steep gorse-encrusted hills led up to the farm. Stretching endlessly behind and ahead of her was the peninsula's edge, whose marshy pasture, used for grazing sheep, ended abruptly at the brink of the tide in a narrow verge of rock, curdled and sculpted by prehistoric fire and ice. It was along this verge that Isserley most loved to walk (Faber 2000, 62).*

Inspired by Springgay and Truman who write about walks as “methods of thinking-making-doing research” (2017, 211) and due to the elevated importance of a daily walk within the Aotearoa New Zealand 2020 Covid-19 lockdown restrictions, I propose a technically mediated walk-in-companion with arts-based researcher, Corinna Berndt who lives in Naarm | Melbourne. Despite different physical locations, Naarm | Melbourne, Australia and Christchurch | Ōtautahi, Aotearoa, New Zealand we both experience COVID-19 lockdown restrictions. Walking in our local neighbourhood remains permissible and is a daily highlight. Many people are out walking at various times of the day. I particularly like walking at dusk, the liminal threshold between the day closing and the night beginning. The changing light encourages an Isserley-inspired sensitive perception and a deep appreciation of beauty and nature, an openness to defamiliarization that allows for sympogogy (Flynn 2021) becoming with the world, bringing in the transversal alliance, an attunement with the human and non-human. I have walked in awe of some beautiful pink and blue sunsets. During this period of time while we practice social/physical distancing it strikes me that we are physically alienated from others; however, through the machine, technology—screen and speaker, we are still connected on email, social media and through zoom, as avatar, background-curated.

The walk honours the humalien, Isserley, as chimera, a she-monster, an augmented, modified hybrid creature, part human (alien), part vodsel (Earthling). The mythological she-monster chimera is hybrid, a winged lioness with human or goat's head, a snake's head at the end of her tail. In game culture, the chimera is phoenix, where technology meets alien, with an automated tail, winged, alien-faced and bodied. While walking, I wonder if I am a chimera too. I dip into Donna Haraway's

s(f)eminal, cult text, *A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century* (1985) and read the answer to my wondering, written in Aion-time forty years ago: "By the twentieth century, our time, a mythic time, we are all chimeras, theorized and fabricated hybrids of machine and organism – in short, cyborgs" (Haraway 1985, 7). As we explore the posthuman heroine through the alien monster, Isserley, we contemplate Haraway's statement, "Though both are bound in the spiral dance, I would rather be a cyborg than a goddess" (Haraway 1985, 68) and welcome in the chimera, the hybrid.

Not just a release from cabin-fever stroll, this walk-in-companion adventure, a mini-journey, intends to encourage the reward of sensing the environment with a deep appreciation of nature and the beauty of Earth by embodying the perspective of the alien, Isserley, from *Under the Skin* (Faber 2000). Thus Isserley's gaze zigzags through me, and my experience of walking during the Covid-19 lockdown, but also through another researcher in Naarm | Melbourne, an ally, walking with me from her location of the Covid-19 lockdown. Attunement with Isserley's gaze may defamiliarize the experience to allow for a posthuman awareness in connection to the transversal alliance, through the sensory experience. Jelaca (2018) suggests that the alien is a liminal figure along the human-posthuman spectrum, familiar yet strange, human-like, Isserley is "an alien body without organs in the process of becoming woman" (Jelaca 2018, 390). Thus, this walk too, is in pursuit of liminality, hybridity, a connection with nature where we can look under the permeable boundary of skin and "rethink the relationship between depth and surface, between inside and outside and between self and other" (Jelaca 2018, 390). I wonder too if the walk can be lifted into posthuman pedagogy. I am aware that in Aotearoa New Zealand, Australia, and Scotland where I, my companion researcher, and Isserley reside we are fortunate as walks in nature near water are possible. Not all learners can engage with their environment so easily, as some live in polluted contaminated areas, amongst toxic waste. Knowing this adds to the deep appreciation for nature encountered on the walk.

Providing learners, for example, high school students, with opportunities to learn outside of the classroom through walks may help generate off-the-beaten-path thinking that encourages a posthuman attunement and supports the capability building of meaning making, perspective taking, critical inquiry and taking action, as noted in the Figuration of the Posthuman Learner. Such walks in pursuit of liminality may alleviate anxiety regarding uncertainty, allowing for new possibilities, creativity and openness to the future, as Posthuman Learner. Affirmative education, such as walks in-companion, allows for transformational possibilities, and interconnectedness through posthuman pedagogy that engages with energizing projects. Offering opportunities where learners can spend time in public spaces, such as a walk by a river, could allow for an integrated approach to learning where a multiplicity of transdisciplinary learning opportunities inspire the imagination: mathematical, scientific, artistic, textual, historical, geographical, musical, dramatic, energetic, liminal inquiries that enact care for the planet.

Pedagogy that includes walks in nature is not a new idea. Various approaches to learning value education outside of the classroom, Forest Schools (Blackham, Cocks and Taylor Bunce 2021) the holism movement of Summerhill (Neill 1993), outward bound education, Montessori and Waldorf Steiner schools are supportive of pedagogy that include walks in nature. A posthuman approach widens the lens to include the agency of human and non-human entities acknowledging the life force in all. Thus, there is an openness to the non-human as having something to tell us "as an organic, speaking subject" (Jones and Hoskins 2016, 77), the reciprocity of an

affective dynamic.

The following passage selected from *Under the Skin* (Faber 2000) describes Isserley's solitary morning walk. To avoid recognition as alien on Earth, Isserley's disguise required that her limb-like tail was removed causing residual physical backpain which exercise seems to help. Along the walk she removes her shoes to reveal her feet, which are still in their original alien form. Her toes are long and finger-like and able to curl around stones; she can balance on these finger toes. This is risky as she might be seen, and her alien identity revealed. A sheep sees her, but she isn't worried about this as she loves sheep; they remind her of her kind's young. In this micro-event of dipping her toes into water lurks the *potentia* of transformation as Isserley is becoming geo, becoming terrestrial, bonding with planet Earth in her original form.

*She was taking a risk in baring her feet to the world, but in the unlikely event that anyone else were to stray onto the beach, she'd see them coming for hundreds of metres or more. By the time they were close enough to see her feet, she could easily retrieve her shoes, or even wade into the water if need be. The relief she felt in allowing her long toes to splay over the rocky shore, curling around the stones, was inexpressible (Faber 2000, 62).*

In the risk-taking micro-action of the process of becoming, Isserley experiences a moment of transformation, the relief of an embodied connection to the stones and water of the rocky shoreline which highlights her open-ness to the life-force of the transversal alliance. Isserley encounters transformation, a release from the *potestas* of hiding her true self, to becoming with the world, a sympogogy within her cyborg's journey. Rosi Braidotti writes about remembering that we are, "a subject-in-becoming" and to open up spaces of movement through creative effort so, "you actually reinvent yourself on the basis of what you hope you could become with a little help from your friends" (Braidotti 2011, 153). On this walk, my companion researcher, Isserley and nature are all friends, allies. Springgay and Truman write about walks in companion as methodologies which "become event when the knowledge is shared" (2017, 211). Perhaps the walk may enable a posthuman encounter with the life force, zoe/bio/geo/techno.

I consider becoming-earth. Braidotti explains that "[t]he planetary or becoming-earth dimension brings issues of environmental and social sustainability to the fore, with special emphasis on ecology and the climate change issue" (2013, 67). Education researcher, Jayne Osgood engaged in walks during her Covid-19 lockdown, noting that "[d]aily walks with no discernible purpose have generated rich multispecies encounters that draw into sharp focus the need for storytelling and an on-going imperative for off-the-beaten path thinking" (2021, 5), resonating with the notion of sympogogy, learning with the world through stories. In particular, Osgood notes that the walks have drawn her attention to contaminated diversity through environmental destruction. Indeed, during my walk along the Heathcote River | Ōpāwaho in Christchurch | Ōtautahi, Aotearoa New Zealand I note the congested murky water, confirming that many of our rivers are no longer the swimming holes of our youth. Despite the lament, I relish the clean oxygenated air, lacking on Isserley's home planet. In gratitude, we can enjoy Isserley's delight in the beauty of pebbles and shells along the Firth Shore.

*The variety of shapes, colours and textures under her feet was, she believed, literally infinite. It must be. Each shell, each pebble, each stone has been made*

*what it was by aeons of submarine or subglacial massage. The indiscriminate, eternal devotion of nature to its numberless particles had an emotional importance for Isserley; it put the unfairness of human life into perspective (Faber 2000, 64).*

I would like to be able to drive to a shore-line that has pebbles and shells to draw closer to Isserley's experience; however, under Covid-19 restrictions we are confined to our neighbourhoods, so the walk is along a nearby river. I consider territories and becoming-animal.

*A sheep had strayed onto the pebbled shore not far from her, and was sniffing boulders as large as itself, licking them experimentally. Isserley was intrigued: she hadn't thought sheep could walk on such a surface, had thought their hooves wouldn't permit it. But here it was, stepping across the treacherous morass of stones and shells with apparent ease (Faber 2000, 66).*

In tune with Isserley's connection to and encounter with the sheep, I recall an encounter on a lock-down walk with a 'fellow-traveller'; a sheep covered with the warmth of its woolly coat, on Rāpaki Track, Christchurch | Ōtautahi; we gaze at each other in what feels like a type of communication.



*Figure 1. Lamb in tussock. Rāpaki Track, Port Hills, Christchurch | Ōtautahi, Aotearoa New Zealand. Own photo. 2020.*

Isserley's walk captures a posthuman alliance of geo/bio/techno. While remaining alert for the human, from whom she would hide her true self, Isserley is in communion

with the non-human: a pebbled shore, water, the beach, the horizon, gorse-encrusted hills, a marshy pasture, sheep, rocks, a shell, a pebble, a stone, colours: orange, silver, grey, black, pink, white; a boulder, shoes, laces, a breeze, feet with long toes, the tide, pools. Isserley notices with keen attention nature's devotion in creating an infinite variety of shells, pebbles, and stones. Author, Ursula K. Le Guin's carrier bag theory of fiction appreciates the natural details caught in stories:

tiny grains of things smaller than a mustard seed and intricately woven nets which when laboriously unknotted are seen to contain one blue pebble, an imperturbably functioning chronometer telling the time on another world and a mouse's skull; full of beginnings without ends, of initiations, of losses, of transformations and translations (2019, 35-36).

Noticing the details of a walk offers a posthuman pedagogical experience through affective relations with the human and non-human, allowing for *potentia*, a reward, sympogogy (Flynn 2021), a making-with the world, learning through stories.



Figure 2. Autumnal leaves on the Heathcote River | Ōpāwaho, Christchurch | Ōtautahi, Aotearoa New Zealand. Own photo. 2020.

### **The walk in-companion**

This is not the first time that I have taken this walk along the river. I know it from old, running along it as an eleven-year-old training for the school athletics day. As noted in the exhibition, 'Breathe Deep' (12 June - 29 August 2021), "A road can be walked more than once, with different sights and insights each time" (Zheng, 26). Artists Chan et al. (2021) walked the same path over five days discovering new details every time, documenting their field notes as drawings; for our walk, the field notes are photographs. When walking, we hold Isserley's alien point of view, defamiliarizing the

encounter by being open to the new and the possibility of transformation in the ceasing to be and the not yet of the present moment. Like Isserley, we can look, smell, hear, feel our local neighbourhoods with a fresh alien perspective, imagining what Isserley might notice if she were here. I take a photo of a reflection, an autumn tree caught in the river. In Naarm | Melbourne, my walking companion takes a photo of an electricity pylon, a human-made tree. Both carry the life force, bio, techno, connected to geo within and through them. Beside the pylon people walk and cycle.



*Figure 3. Autumn trees reflected off the Heathcote River | Ōpāwaho. Christchurch | Ōtautahi, Aotearoa New Zealand. Own photo. 2020.*



*Figure 4. Electricity pylon. Merri Creek Trail, Naarm | Melbourne, Australia. Companion researcher, Corinna Berndt's photo, used with permission. 2020.*

Without pre-planned synchronicity, we arrive upon a pedestrian/cycle bridge at the same time and cross it. My walking companion is at Merri Creek in Naarm | Melbourne, I am at the Heathcote River | Ōpāwaho, in the leafy suburb of Opawa in Christchurch | Ōtautahi.



Figure 5. Crossing the Footbridges. Footbridge, Heathcote River | Ōpāwaho, Christchurch | Ōtautahi, Aotearoa New Zealand. Inset: Footbridge, Merri Creek Trail, Naarm | Melbourne, Australia. Own photo with companion researcher Corinna Berndt's inset photo, used with permission. 2020.

We look at the landscape with posthuman eyes, noticing the electricity power lines, the trees, the people going for a run or a bike ride, walking their dogs, the underbridge and graffiti, the ducks, the trees, the machines: a car, a dredge; the rubbish left by humans, the rising crescent moon. Along the lines of longitude and latitude, each entity has its own velocity of slowness or acceleration, dynamically inter-related with its surroundings. We see the ordinary, natural and man-made, animals, people and plants; however, we are invited to see them anew as would the alien Isserley in *Under The Skin* (2013). Jelaca explains, "as the alien moves through space and observes the mundane, the spectator is aligned with her perspective and is compelled to perform a phenomenological shift in perception, not taking for granted the familiarity of the ordinary" (2018, 387-8). Not taking for granted the familiarity of the ordinary, we notice the seedlings growing at a riverside school and the glow of late afternoon sunlight on Poplar trees, a colonial implant, planted for shelter and ornament. Poplar trees, too, are storied, associated with the myth of Persephone, they symbolise transition to the afterlife, sacred to the Underworld. We observe the plants of Aotearoa New Zealand: the flax, the kowhai, the grasses, and the eucalyptus trees of Australia, long time companions of the land.



Figure 6. *New seedlings and autumnal poplar trees caught in late afternoon light. Next to Heathcote River | Ōpāwaho, Christchurch | Ōtautahi, Aotearoa New Zealand. Own photo. 2020.*

I think about the alien character, Isserley, looking at Earth through her alien eyes. I wonder if Isserley is an echo of Ulysses, or Odysseus, the heroic adventurer of Homer's epic poem the *Odyssey* (2000). Their names sound similar, lots of 's's. Isserley is an adventurer too, she has travelled across planets, made huge sacrifices, lost her alien-beauty to take on vodsels, human, form. Her cyborg's journey is not just external, she has an internal journey, to find her *potentia*, her purpose, not as an individual caught in a capitalist neoliberal web, but as an individual interconnected with the transversal alliance, the bio-geo-techno, where encounters with human and non-human evoke affect, sympogogy, a deep enchantment with the world.

Connections between humans and their environments are fundamental in indigenous cosmologies (Braidotti 2022). Braidotti writes about the Australian Indigenous Yolngu concept of 'shimmering' which, "expresses the vitality and brilliance of the light, its dynamic dancing quality... a transitive state of perpetual motion without pre-determined destination... Shimmering manifests a deep enchantment with the world, an engagement with its perennial flows of activity" (Braidotti 2022, 180-181). By widening the lens within education to include the non-human in posthuman pedagogy we can encounter objects, "as an organic, speaking subject... as having something to tell us" (Jones and Hoskins 2016, 77). Thus, a found red heart on paving stones may offer its own tale.

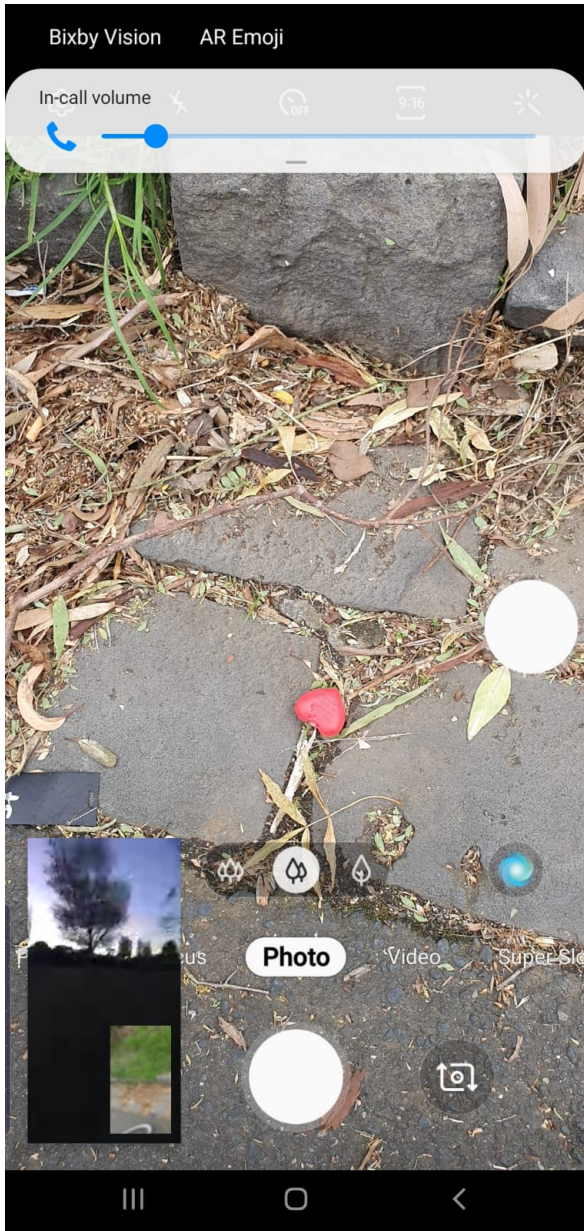


Figure 7. Found red heart, fallen eucalyptus leaves on paving stones, Merri Creek Trail, Naarm | Melbourne, Australia. Inset: Silhouetted trees, Hanson Park next to Heathcote River | Ōpāwaho, Christchurch | Ōtautahi, Aotearoa New Zealand. The different time zones between Australia and Aotearoa New Zealand are distinguishable through the changing light. Companion researcher, Corinna Berndt's photo, used with permission, with own inset photo. 2020.

The walk offers contemplative space. Seeing a red heart near eucalyptus leaves on paving stones brings to mind the symbol of a heart as love. Love is held in posthuman feminism: “[P]osthuman feminism does produce an affirmative philosophy of love, in the alternative forms of posthuman pregnant thought, gestational and trans-corporeal encounters. What is ultimately at stake is a sense of futurity and love for the world” (Braidotti 2022, 176). Education too may hold a sense of ongoing-ness and love for the world, love that allows for relationship with the human and non-human. Perhaps the different mode of humanity Val Plumwood inquired into is posthuman, which builds on an affirmative tradition that “reaches out towards a different philosophy of love that is relational, heterogeneous, process-oriented”

(Braidotti 2022, 179). Can education include posthuman pedagogy? That is, pedagogy that allows for, “a new way of combining ethical values with the well-being of an enlarged sense of community, which includes one’s territorial or environmental inter-connections” (Braidotti 2013, 190). Let us hope so, for this enlarged sense of community, through the transversal alliance, is the pandemic portal, the rupture, the line of flight, that we-are-all-in-this-together.

I enjoy the twilight as riverside lamps flicker on, winter-bare trees silhouetted in the mauve dusk of a newly darkening sky. The sun sets and a crescent moon rises. The Earth feels peaceful despite inhabiting a pandemic-determined lockdown, where the *potestas* of restricted movement has unleashed the *potentia* of enlarging space and time in local walks. Like Isserley, I find solace in this posthuman attunement in the liminality of the present moment with the transversal alliance, geo-bio-techno. Skeletal trees speak of cyclical seasonal time, the slow rhythm of a winter garden, resting, a moment of ceasing to be and not yet becoming, harnessing power, in preparation for spring growth. The miracle of photosynthesis, plants offering the oxygenated air that so delights Isserley; a seemingly effortless ongoing-ness.



*Figure 8. Silhouetted trees, newly lit streetlamp, crescent moon. Heathcote River | Ōpāwaho, Christchurch | Ōtautahi, Aotearoa New Zealand. Own photo. 2020.*

The shimmer of a crescent moon in a twilight sky has something to tell us too. Revealing just a glimpse of its full circular self, the moon reminds us of a different cyclical time, the monthly play of light caught in a spiral dance, orbiting Earth. Isserley would know of different moons and see ours with curiosity. The distant glow of the moon is echoed by the brighter and closer riverside streetlamp, yellow with a tinge of green, revealing the footpath. The sun’s rays are still visible; a glow that talks to the lamp as well, as the Earth rotates, moving swiftly towards the night. The Sun and Moon

tell us of a swifter cycle, that of day and night, balancing forces, ceasing and becoming. A mauve sky tells me that soon the warmth of the day will disappear, and I should head home. My body is attuned to the annual, seasonal, monthly, daily perpetual cycles of Aion time. Aion time is described by Braidotti as “the impersonal continuous present... perpetual becoming” (2013, 133). Aion time is unbounded, circular, ongoing as portrayed by the ouroboros.

This experimental posthuman approach to pedagogy that leaps from speculative fiction as a mode of expressing posthuman ideas is enacted in embodied experiential ways, such as a technically mediated walk-in-companion. It asks readers and learners to question their relationships and place in the world to stimulate posthuman ways of living with others. Our current necessity requires navigating uncertain times, thus we need to provide affirmative pedagogy that enables students to navigate terra ignota (Le Guin 2019), so when walking the concentric passageways of the labyrinth-of-life, learners can rely on their knowledge and belief in themselves as collaborative problem solvers to overcome obstacles and find their way through.

In this article, I explore how transformation is part of the cyclical hero's journey (Campbell 2008) now repositioned as the cyborg's journey; and transformation of the learners' experience, via micro-changes, may be possible through stories and expanded via pedagogical approaches such as thinking-making-doing walks-in-companion (Springgay and Truman 2017). For Braidotti, “the strength of the literary text is that it can engage with the outside world and all its complexity-linguistic, geological, ethnic, biological, political, technological and zoological” (2017, 178-179): that is, the transversal alliance. Combined with the joy within Affirmative Ethics we have an opportunity to re-world our world and acknowledge eco-feminist Val Plumwood's thoughts to go onwards in a different mode of humanity. The power of the imaginary held in narratives is noted through the words of Donna Haraway: “It matters what thoughts think thoughts. It matters what knowledges know knowledges. It matters what relations relate relations. It matters what worlds world worlds. It matters what stories tell stories” (2016). Making-with walks as a mode for thinking-doing supports our relations with the world. Stories are a springboard for posthuman pedagogy, a shimmering sympogogy, that may offer solace to learners grappling with our times.

## Conclusion

The rupture of Covid-19 and the climate emergency highlight our terrestrial interconnectedness and may trigger the *potentia* of transformation in pedagogy—a line of flight, a radical call to work together. Experimental pedagogy towards a posthuman education may involve the thinking-making-doing available through a walk-in-companion inspired by a speculative fiction hybrid heroine, like Isserley. Snaza et al. note that “we believe posthumanism requires us to re-orient ourselves *elsewhere*, and begin, today, looking at ways that education can mobilize the possibilities of this elsewhere” (2014, 51). This article has explored this *elsewhere* found in the imaginary of a speculative fiction narrative, which holds the cyborg's journey of becoming, where connection with nature can transform points of resistance, affirmatively transforming *potestas* to *potentia*. This article purports that just as a cyborg with help from posthuman companions can positively transform their experience, a learner may transform their learning journey as a member of the transversal alliance, the human and the non-human: the community of the new that welcomes in the Posthuman Learner. The possibility of learner transformation via thinking-making-doing a walk-in companion with allies, an alien character and a posthuman research companion

during the Covid-19 lockdown. The walk was an active balm during the pandemic, a positive connection in a time of social isolation. Building capabilities such as taking on the perspective of an alien, we were cyborgs, technologically mediated and interconnected via WhatsApp, grounded in our respective liminal earthly environments, where water meets land by the Heathcote River | Ōpāwaho, Merri Creek and the Moray Firth. Author as walker, I trace fieldnotes and write a poem:

### **The Walk**

A walk in  
nature is a solace  
trust and hope for  
sanctuary in a shoreline  
a space of stillness, unhurried creativity  
take an alien viewpoint  
expect difference and  
listen radically  
for something small trapped inside.  
Recognise interconnected relations of  
becoming and transforming  
make beauty and meaning to share  
engage with our lively world  
while it's still here  
with compassion, peace and joy.

Inspired by Berlant and Stewart (2019), who use a hundred words as a writing constraint to amplify what is happening in atmospheres and rhythms of encounter, I finish with a hundred words in support of our learners' becoming, and in preparation for pandemics to come (Gaines-Buchler, 2025).

### **Covid-19 – How does it feel?**

Covid-19: the threatener, where any-body will do;  
Covid-19: the reveal-er, of who trusts who;  
Covid-19: the connector, geo/bio/techno;  
The global pandemic, a local disruptor  
zoonotic leaps  
Zoom-tastic meets  
The viral unseen, like love or a dream  
(not to mention the climate emergency)  
Not as a fix, but a suggestion:  
could Posthuman concepts allow  
a line of flight with non-human others?  
Expecting difference, a transversal alliance  
the life force in all and Ethics of Joy  
zigzagging, becoming, transpositional.  
Learners, on journeys through liminal borders  
meet mentors, tricksters, shape-shifters  
make allies, face challenges, ordeals  
overcome obstacles, like stoics:  
from *potestas* to *potentia*.

## References

- Baum, Frank, L. (1900). *The Wonderful Wizard of Oz*. Chicago, USA: George M. Hill Company.
- Berlant, L. and Stewart, K. (2019). *The Hundreds*. Durham: Duke University Press. <https://www.dukeupress.edu/the-hundreds>.
- Birdsall, S. 2020. Nurturing hope: From climate-change worriers to eco-warriors. *set 3*: 48-53.
- Blackham, L.; Cocks, A., and Taylor Bunce, L. (2023). 'Our forest school isn't just the trees.' *Forest schools: micro-communities for social and emotional development. Journal of adventure education and outdoor learning* 23, no. 2: 58-169. <https://doi.org/10.1080/14729679.2021.1984964>.
- Bolstad, Rachel. (2020). How can New Zealand schools respond to climate change? *set 3*: 30-39.
- Braidotti, R. (2006). *Transpositions*. Cambridge, UK: Polity Press.
- Braidotti, R. (2011). *Nomadic theory: The portable Braidotti*. Columbia University Press.
- Braidotti, R. (2013). *The posthuman*. Cambridge, UK: Polity Press.
- Braidotti, R. (2018). Joy, Ethics of. *The Posthuman Glossary*, edited by Rosi Braidotti and Maria Hlavajova, 221-224. London, UK: Bloomsbury Academic.
- Braidotti, R. (2019). *Posthuman knowledge*. Cambridge, UK: Polity Press.
- Braidotti, R. (2022). *Posthuman feminism*. Cambridge, UK: Polity Press.
- Campbell, J. (2008). *The hero with a thousand faces* 3<sup>rd</sup> ed. California: New World Library.
- Chan, W., Hui, W., Xapa Lit, Rai Aki, R., and Tse, E., (2021). *Five days walking. Breathe Deep: An exhibition about humans, trees, and the breath that connects us*. 4F tomorrow maybe, Eaton Hotel, Jordan, Hong Kong 12 June – 29 August, 2021.
- Faber, M. (2000). *Under the skin*. Great Britain: Canongate Books.
- Flynn, A. (2021). How could sympogogy mobilize the educative praxis of learning-with the world? Microblog, May 2021. *Common Worlds Research Collective*. <http://commonworlds.net/how-could-sympogogy-help-mobilize-the-educative-praxis-of-learning-with-the-world/>
- Gaines-Buchler, E. (Spring, 2025). Are we ready for the next one? What COVID, five years later, can teach us in an age of pandemics. *John Hopkins Magazine*. Baltimore, US: John Hopkins University. <https://hub.jhu.edu/magazine/2025/spring/ready-for-next-pandemic/>
- Haraway, D. J. (1985). *A cyborg manifesto: Science, technology, and socialist-feminism in the late twentieth century*. Socialist Review.
- Haraway, D. J. (2016). *Staying with the trouble.: Making kin in the chthulucene*. Durham and London, UK: Duke University Press.
- Haraway, D J. (2019). Introduction. *The carrier bag theory of fiction* by Ursula K. Le Guin. Ignota ignota.org. UK: CPI Group.
- Hipkins, R. (2017). *Weaving a coherent curriculum: How the idea of 'capabilities' can help*. New Zealand: New Zealand Council for Education Research.
- Homer. (2000). *The odyssey*. Translated by Samuel Butler. Open Road Integrated Media, Inc.
- International Commission on the Futures of Education. (2020). *Education in a post-COVID world: Nine ideas for public action*. UNESCO Open Access Repository (<http://www.unesco.org/open-access/terms-use-ccbysa-en>).
- Jelaca, D. 2018. Alien feminisms and cinema's posthuman woman. *Signs: Journal of Women in Culture and Society* 43, no. 2: 379-400.

- Jones, A. and Hoskins, T. K. (2016). A mark on paper: The matter of indigenous-settler history. *Posthuman research practices in education*, edited by Carol A. Taylor and Christina Hughes, 75-92. UK: Palgrave Macmillan.
- Le Guin, U. K. (2019). *The carrier bag theory of fiction*. Ignota ignota.org. UK: CPI Group.
- Neill, Alexander Sutherland. 1993. *Summerhill School: A new view of childhood*. UK: Hart Publishing Company.
- Nussbaum, M. (1995). *Poetic justice. The literary imagination and public life*. Unitarian Universalist Association of Congregations.
- Osgood, J. (2021). "From multispecies tangles and Anthropocene muddles: what can lichen teach us about precarity and indeterminacy in early childhood?" In *Storying in Early Childhood Research & Practice: Posthuman & Autoethnographic Approaches* edited by Teresa K. Aslanian. London, UK: Springer.
- Pascoe, J. (2018). The heroic learner: Engaging and inspiring learners through the art of heroism. In *Heroism and wellbeing in the 21<sup>st</sup> century: Applied and emerging perspectives* edited by Olivia Efthimou, Scott T. Alison and Zeno E. Franco, 61-71. London and New York, Routledge.
- Plumwood, V. (2007). A review of Deborah Bird Rose's 'Reports from a wild country: Ethics for decolonisation' *Australian Humanities Review, Ecological Humanities* 42. <http://australianhumanitiesreview.org/2007/08/01/a-review-of-deborah-bird-roses-reports-from-a-wild-country-ethics-for-decolonisation/>
- Roberts, P. 2018. "Theory as research." In *Theory and Philosophy in Educational Research*, edited by John Quay, Jennifer Bleazby, Steven A. Stolz, Maurizio Toscano and R. Scott Webster, 23-35. London and New York: Routledge.
- Snaza, N., Appelbaum, P., Bayne, S., Carlson, D., Morris, M., Rotas, N., Sandlin, J., Wallin, J., and Weaver, J. (2014). Toward a posthumanist education. *Journal of Curriculum Theorizing* 30, no. 2: 39-55.
- Springgay, S., and Truman, S. E. (2018). "On the need for methods beyond proceduralism: speculative middles, (in)tensions, and response-ability in research." *Qualitative Inquiry* 24, no.3: 203-214. <https://doi.org/10.1177/1077800417704464>
- Stewart, G. T., Devine, N. and Benade, L, (Eds.). (2021). *Writing for publication: Liminal reflections for academics*. Singapore: Springer.
- Taylor, C. (2017). Is a posthumanist *Bildung* possible? Reclaiming the promise of *Bildung* for contemporary higher education. *Higher Education: The International Journal of Higher Education Research* 74: 419-435 <https://doi.org/10.1007/s10734-016-9994-y>
- Taylor, C. (2018). "Each intra-action matters: Towards a posthuman ethics for enlarging response-ability in higher education pedagogic practice-ings." In *Socially Just Pedagogies: Posthumanist, Feminist and Materialist Perspectives in Higher Education* edited by Rosi Braidotti, Vivienne Bozalek, Tamara Shefer and Michalinos Zembylas, 81-96. London, Great Britain: Bloomsbury Academic. <https://doi:10.5040/9781350032910.ch-005>.
- Tsing, A. L., Swanson, H. A., Gan, E., and Bubandt, N. (Eds.). (2017). *Arts of living on a damaged planet: Ghosts and monsters of the Anthropocene*. Minnesota: University of Minnesota.
- Ulmer, J. B., Kuby, C. R., and Christ, R. C. (2020). What do pedagogies produce? Thinking/teaching qualitative inquiry. *Qualitative Inquiry* 26, no.1: 3-12. <https://doi.org/10.1177/1077800419869961>.

Zheng, B. (2019). Hui ti xiu: Drawing weeds practice. *Breathe Deep: An exhibition about humans, trees, and the breath that connects us*. 4F tomorrow maybe, Eaton Hotel, Jordan, Hong Kong 12 June – 29 August, 2021.