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ARTICLE

# Wetlands as Learning-Creation Sites for Wild Ecologies

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**Abstract**
This paper explores the multiple stories and affective traces that wetlands and swamps generate in more-than-human environments. Situated on what was once a swamp, Naarm (Melbourne) provides the setting for the authors' collective creative inquiry. This work explores more-than-human methodologies of knowledge creation, examines how these approaches impact multispecies justice and investigates how wetlands can serve as transitional, unstaged spaces that challenge and disrupt colonial infrastructures. While drawing back on memories and experiences of wetlands in Southern China and Southeast Europe, the authors incorporate poetic mappings and autoethnographic interviews in exploring the reminisces and encounters living with more-than-human pasts and presents. Following the way of wetlands, the authors seek to foster unexpected ecologies between water, land, species and a multiplicity of ontologies in the abundance of in-between spaces as a generative learning-creation site.

**Keywords:** Affect; aqua-terra; be(com)ing swamp; liminal; wetlands as non(place)

## Introduction

Swamps occupy the threshold between terrestrial and aquatic worlds, where stagnant water, saturated mud and accumulated sediments hold the memory of past ecosystems. Throughout the day, birds and other species navigate this environment, engaging with its wet surfaces and substrates. Beneath the ground, life thrives in fertile layers where shifting compositions of mud create a dynamic, multisensorial landscape. As containers of carbon from the atmosphere, wetlands are shaped by anthropocentric narratives, yet they reveal alternative ways of life defined by their uncommon nature, resilience and adaptability. Wetlands are silent climate regulators and secret hosts of migratory birds and many species affected by climate change, often unattended in anthropocentric perspectives. Wetlands hold the past within layers of water and carbon, where accumulated organic matter becomes fertile substrate for diverse non-human life.

The liminal nature of wetlands — neither fully terrestrial nor aquatic — enables us to reconsider human-environment relationships beyond anthropocentric frameworks. These uncertain, fluctuating boundaries contain multiple ecological histories and support diverse forms of life. We attend wetlands as sites of continuous transformation, of confluencing (*aqua-terra*), forging new relationships through the dynamic interplay of bodies and space-times in the fertile mud. More than fluid, the practice of be(com)ing with the swamp is also attendance to the swamp's liminality, interdependencies and the paradoxical, intertwined materialities of wet and dry.

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Author 1 grew up near Obedska Bara, a wetland of the Sava River in Southeast Europe. Wandering around ponds and the spaces in between wet and dry areas was a part of her upbringing. The wetland, with its distinctive ecosystems of birds and plants, has shaped her thinking, fostering multispecies listening and a deep sense of more-than-human belonging. Now, residing in Naarm (Melbourne), she acknowledges the privilege of being on the unceded lands of the Kulin Nations, where she is able to dream and tell stories about lost wetlands and the importance of these ecosystems for our understanding of more-than-human worlds in the Anthropocene.

Born in the North but moved to southern China in their adolescence, Author 2 grew up by the coastal wetlands. Mangrove forests, bodhi trees and water birds became part of her everyday view, alongside the creeping rise of concrete. Later, as an adult, she learned these wetlands hosted over 100 species of migratory birds, including egrets from northern China. Unaware of the transitional characteristics of the swamp as a child, her love for the wetlands might have come from being a migratory bird herself. Living on the unceded lands of the Kulin Nations, Author 2 would like to pay tribute to the elders, past, present and future, in having the opportunity to engage with the swamp of Naarm and its history.

Our creative explorations propose non-anthropocentric, poetic and affective ways of be(com)ing with the swamp. Here, in this work, our understanding of the affect is informed by Gilles Deleuze and Felix Guattari (1988; 1994) and their influence by the Spinozian framework. The nature of the affect in Deleuze and Guattari (1988) is explained through the understanding that bodies are considered to have "affectio" (Deleuze & Guattari, 1988), described as modes or attributes of the body (p. 48). Simultaneously, "*affectus*" or the affect is a transition existing as an external substance (Deleuze & Guattari, 1988), always in transition to something new, to the potential of what can be created and to the new state of becoming (Deleuze & Guattari, 1988, 49). Moreover, "[t]he affection refers to a state of the affected body and implies the presence of the affecting body, whereas the affectus refers to the passage [or movement] from one state to another, taking into account the correlative variation of the affecting bodies" (Deleuze & Guattari, 1988, 49). In the Deleuzian framework, "affect" refers to non-representational force or intensity that exists between bodies (human or non-human) and shapes how they interact and relate to each other. It is a kind of raw, dynamic force that drives experiences and transformations, distinct from emotions or feelings, which are often viewed as more subjective or personal. This offers a fugitive approach, escaping the hegemonic, objectifying and extractionist lenses applied to the waters and lands. We explore the (way) of the swamp as a creative intervention site into new modes of thinking, learning and doing. We offer propositional methodologies and a language of the swamp emerging from our creative encounters with the wetlands. Attuning to the durational experience while immersed in wetlands' wildness, we offer the imaginative potential of fluid bodies navigating multiple temporalities and multi-species interactions, forging the eco-poetics of the swamp. Oppermann (2023) states that, "in a way, the storied waters afford a much better and broader critical perspective on the environment, the plight of aquatic beings and the damaged waters than our existing stories and cognitive systems" (p. 40). Be(com)ing (with) a swamp enables us to enter uncertainty and listen to wildness. Following the wild manners of wetlands, we explore unexpected ecologies between water, land, species and a multiplicity of ontologies in the abundance of in-between spaces as a generative learning-creation site.

We draw inspiration from feminist thinkers (Haraway, 2016; Åsberg & Braidoti, 2018), who push the boundaries of understanding inequalities in material and social contexts, as we explore the repressed wildness of a swamp to the unattended ways of poetic worlding emerging from the embodied experience of be(com)ing (with) the swamp. By looking beyond the technologies of intelligence, hegemonic processes and fast solutions, our mappings of swamp(ontologies) aim to create the opposite — a mixture of bodies, time, (non)places and materialities combined in multiple events, vying for multitudes of potential worlds and be(com)ing otherwise. In applying our swamp(ontologies), attending to plural becomings and mixed temporalities, the sections/

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chapters were written and can be engaged non-linearly, which also tributes to the swamp figuratively. Considering Naarm where we currently live, as being situated on a wetland, the collective creative inquiry seeks to delve into more-than-human methodologies of knowledge creation, exploring their potentials for multispecies justice by positioning wetlands as liminal, unstaging grounds challenging heterogeneous infrastructures. Moreover, we are considering how engaging with wetlands influences knowledge creation and the potential implications this may have for broader learning and teaching practices in our work. In conclusion, towards the end we propose poetic expressions and language as manifestations of more-than-human animacies that invite readers to recompose our writing, thinking and learning practices that seek to dismantle traditional relationships with the nonhuman world. Additionally, we share stories and memories from our own intersectional backgrounds and relationships with swamps to provide affective traces that guide and express sites of knowledge creation. The specific insights we draw in relation to learning are connected with critical posthuman and feminist approaches challenging anthropocentric views of the human-nature relationship (Rousell & Cutter-Mackenzie-Knowles, 2023). More specifically, this is insightful for understanding learning as it provides a basis for thinking through material, corporeal and more-than-human perspectives in co-creating knowledge with the environment. This framework is grounded in the development of new methods and techniques in Deleuzo-Guattarian affective, assemblage-based research, which many authors in these fields are proposing. Moreover, we interested in the notion of affective learning (Hickey-Moody, 2013) and learning that occurs through affective encounters (Rousell & Cutter-Mackenzie-Knowles, 2023; Rousell *et al.*, 2022) in our writing and thinking with swamps. The affect we explore and expand through an *aqua-terra* framework proposes alternative material and epistemological ways of being and writing. This approach emerges as a response to the colonial infrastructures and geoengineering extractions that have shaped the wetland sites we examine. The affect we explore here generates new expressions that operate through both feeling and materiality, enabling alternative modes of thinking and being.

## Tracing the repressed wetlands

On a sunny early winter day in Naarm, we sought traces of the West Melbourne Swamp, walking toward Moonee Ponds Creek. The swamp, drained and filled for city development in the early 20th century, became Appleton Dock in the 1950s. The area's transformation continues with relentless commercial development around West Melbourne and Docklands. Upon arrival, we were surrounded by concrete jungles, roadblocks, construction sites, cranes and material scraps. A new bridge project crossing the Maribyrnong River connects the West Gate Tunnels to Footscray Road. This area, once a vast swamp and salt lagoon with wild meadows, was described by John Batman as "a large marsh, about one mile and a half wide by three or four miles long, of the richest soil not a tree. When we got on the marsh, the quails began to fly . . . At the upper end of this marsh is a large lagoon, upwards of a mile across, full of swans, ducks, geese . . . " (Batman, 1835, as cited in Sornig, 2018, 28). Now, an enormous green serpent, a cycling path over Footscray Road and Moonee Ponds, overlooks the commercial-industrial complex of concrete roads and construction sites alongside a maze-like shopping district in contrasting colours of red, white and black.

Our fascination for the West Melbourne Swamp, or Batman's Swamp, began with our experiences in Naarm (Melbourne), a city notorious for its unpredictable weather. It's not unusual to start the day with a storm, bask in overwhelming sun by afternoon, and end with a cold, windy night. This unpredictability fosters a sense of unsettlement, a tacit sensing of something flowing beneath the surface. As we learned more about Melbourne's colonial history and its disappearing wetlands due to city development, the Yarra River and the muddy-smelling Merri Creek intensified the ghostly whisper of the swamp. Sophie Cunningham described Melbourne's erratic

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weather as the revenge of the repressed wetlands: "To make sense of Melbourne, look to its erratic, brackish wetlands; its muddy, beautiful rivers; its sometimes smelly old lagoons and lakes; and the sudden shock of those moments after heavy rain when the city's cup runneth over" (Cunningham, 2011, as cited in Giblett, 2016, 146). Melbourne's transformation has involved draining and filling wetlands throughout the 19th and 20th centuries; the dust of colonial and industrial events may have never truly settled in the grand scheme of space-time happenings.

We sought paths to Moonee Ponds but found ourselves in a concrete jungle. Wherever we spotted signs of wildness or grassy areas, yellow stop signs and patrolling construction workers blocked our way. Yet, we discovered a hidden meadow and marsh, a remnant of the old West Melbourne Swamp, near the Old Timber Rail Bridge heritage site on Moonee Ponds Creek. In this small, secluded pond, the abundance Batman once described was gone. However, a few birds swam and played, and the air carried a faint scent of marsh and lagoon, distinct from the asphalt roads, and a slower rhythm contrasted sharply with the ever-growing concrete jungle. The Old Timber Rail Bridge reflects the history of swamp draining and canal widening for coal transportation in the area in the late 19th century.

Before its industrial transformations, the creek formed marshy ponds on the floodplain, with extensive saltwater marshes near its entry to the Yarra River, known as Batman's Swamp. Early explorers saw these grassy marshes as ideal for grazing cattle and sheep. However, they soon became an obstacle to Melbourne's development as a financial and trade centre in the mid-18th century (Giblett, 2016). In 1879, Batman's Swamp was drained and filled to create the North Melbourne railway yards. By the early 1930s, during the Great Depression, a shantytown called Dudley Flats emerged along the Railway Coal Canal. Residents scavenged for scrap and rags from nearby rubbish tips and built shelters from discarded materials (Vines, 1999). Dudley Flats provided refuge and subsistence for up to sixty people until the 1940s, when the rubbish tips no longer provided the scavengers a living by the waste recovery schemes initiated in World War 2 (Vines, 1999). Appleton Dock was constructed in the 1950s, marking the industrial development of Melbourne. Before European settlement south of the Murray River, central Victoria was home to the Eastern Kulin language groups, comprising 22 closely connected Aboriginal clans. Each individual in the Kulin Nation was linked by family and spiritual bonds to members of other clans, often at a distance. These bonds were reaffirmed through regular clan meetings in the Yarra River region to recreate alliances, settle disputes and exchange goods (Presland, 2014), where archaeological records show campsites around the swampy area (Canning *et al.*, 2010). Watha Wurrung speakers from the Bellarine Peninsula typically camped on elevated ground at the western end of what is now Lonsdale Street, overlooking the West Melbourne Swamp (Presland, 2014).

The wetland's shrinking continues with highway bridge constructions around Moonee Ponds. The creek realigned multiple times due to persistent flooding and saw its downstream end move in 2002 to accommodate Victoria Dock's development at the Port of Melbourne. From the rapid (re) constructions of the area, navigating the creek from the Old Timber Rail Bridge was impossible for us as we were stymied by roadblocks and flooding warnings. Instead, we detoured through a maze-like shopping district in Dockland and found the realigned pond and its disappearing marsh behind an ice-skating facility. This commercial area, once a lagoon and wasteland, has served as a sanctuary for society's marginalised at various times. The marshy area is larger than the one near the Old Timber Rail Bridge, with meadows and native trees like eucalyptus. Birds nest in these trees, and their songs contrast with urban noise. The marshy scent, bird songs and flowing dark water evoke the rich ecosystems that once existed and the Aboriginals' deep connection to the wetland. The marsh's promiscuous shades of brown the meadow, birds, tree bark, fallen leaves and murky lagoon — contrast with the colourful malls. Brightly coloured cargo containers stack high, with railroads and bridges cutting across the pond, creating a liminal zone for shipment. This industrial landscape contrasts sharply with the small, promiscuous wetland. Though now a modern industrial capital complex, the swamp's ghostly whisperings and its uncertainty and liminality remain. The shifting terrains of wasteland, wetland and commercial park coexist.

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In our creative practice research in Naarm's swamp, we were exploring rhythms of affects, past and present, to tell stories of temporal and spatial multiplicities. European settlers often viewed wetlands as unappealing, describing them as "yellow grass and dull trees amidst a tedious wetlandscape" (Giblett, 2016, 136). Our visit aimed to redefine this aesthetic, focusing on the swamp's sounds, affective traces and carbon matter, imagining and creating its language and implications. Our scenic walk and conversation expanded our understanding of multiple temporalities, from the wetlands of our childhood to the Wurundjeri Woi-wurrung legacies and knowledge of local waters and lands. This process has materialised into storytelling that merges sounds and words, challenging nature – culture divisions and supporting multiplicities of expression. It became a conceptual tool for visualising, thinking and writing with these relational complexities.

## The wild pluriverse of wetlands

In exploring possible modes of engagement with plural worlds and developing more-than-wet methodologies, the authors resonate to Emily Dickinson's poetics related to swamp and Cecily Parks's feminist reading of her swamp poetics. Interweaving with examples of historical swamp draining in Melbourne and conventional negative images of the swamp, the sections explore how swamps' uncertainty and plurality could offer potentials for poetics and new openings.

A swamp is a liminal space, a blend of land and water: "neither land nor water alone, they are waterland, a continuum between *terra* and *aqua*" (Howarth, 1999, as cited in Parks, 2013, 520). It nourishes some plants while intoxicating others, embodying life and death in a strange coexistence. Swamps create unsettling spaces where decay can be enlivening, attracting few minds (Parks, 2013). "Being swamped" refers to the overwhelming chaos of uncontrollable circumstances, embodying abundance, toxicity, paradise and chaos (Parks, 2013). Despite being disproved in the 1860s, swamps still suggest miasma to some and have long been settings for psychic collapse, where the imagination unleashes monsters of shame, fear and revenge (Hurd, 2001, as cited in Parks, 2013, 11). John Watson's reports in *The Argus* (10 February 1866) suggested that draining the Melbourne swamps would "reduce the risk of epidemic by destroying what is now a copious source of miasma" (Watson, as cited in Presland, 2014, 621). In 1873, a Royal Commission described the swamp as "a disgusting swamp as repulsive in its present aspect as it is pestilent in its influence" (Vines, 1999, 12). Many Melbourne residents viewed marshes as disease-ridden and worthless. This view led to the misuse of inner Melbourne's wetlands. West Melbourne Swamp, once a "beautiful blue lake . . . intensely blue, nearly oval, and full of the clearest salt water" (McCrae, 1912, as cited in Giblett, 2016, 141), had by the 1910s become a muddy wasteland filled with scrap iron, broken bottles and railway debris, reflecting modern civilisation's impact.

However, looking through a different lens, as Parks's analysis of Dickinson's poetry of swamp suggests, the chaotic and messy image of a swamp often overlooks the generative potential of breakdowns. Parks's reading of Emily Dickinson's swamp poetics shows that her poetry finds inspiration in its unsettling, dark and occasionally violent nature. For Dickinson, the swamp becomes an (un)staging ground to challenge solid syntax and invite new possibilities, her poems present fluid perspectives, reflecting the swamp's plural continuum (Parks, 2013). The swamp's resistance to order mirrors Dickinson's dynamic poetry, which existed "on the underside of a patriarchal culture dominated by the body, materiality, corruption, infection, sexuality and irrationality - but also origin and creativity" (Miller, 1989, as cited in Parks, 2013, 2). Parks suggests that Emily Dickinson's herbarium reflects the swamp's way despite using the standard Linnaeus system to categorise plants. Dickinson arranged plants unconventionally, grouping unrelated species and leaving some unlabelled. Reflected in her 1859 poem "Arcturus is his other name" (poem 70), Parks posits that Dickinson might have believed botany had no right to name flowers and plants, the unlabelled specimens could signify her refusal to conform to these labels.

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Linnaeus's work, such as *Systema Naturae* (1735), reshaped the natural sciences' view of wetlands, recognising them as habitats for rare and diverse species (Howarth, 1999, as cited in Parks, 2013, 8). Ironically, as Parks points out, the taxonomy that elevated the cultural perception of swamps is precisely what the swamp itself subverts. More than the affirmation of botanical richness and diversity in its usefulness towards society, the swamp's indeterminacy nurtures the breakdown of rigid categorisations of objects and space. For some, this disorder is something to be observed, resisted and even brought under control. For Emily Dickinson, the swamp's disorder was the very pattern through which the natural world conveyed its wildness. The be(com)ing (with) a swamp enables Dickinson to unleash her imagination in an uncertain wild zone, forging a swampy poetics. The hybrid, untimely swamp, bridging *aqua* and *terra*, creates a liminal space that allows for the paradoxical coexistence of opposites. The poetics of swamps is a potential getaway from the stubborn binary systems of difference, but it is also the correlation of life-death, water-land and dynamism-stasis.

## The swamp as a non(-place)

Obedska Bara is a natural reserve, a remnant of the former Sava meander in South-East Europe located along its old riverbed (Sava Parks Network, 2024). This wetland includes a variety of habitats, including marshes, swamps, wet meadows and forests. These diverse environments support a wide range of flora and fauna, some of which are rare and endangered. The wetland is home to more than 220 bird species. Among the notable avian residents are the white-tailed eagle, black stork and the globally threatened ferruginous duck. The wetland water system plays an important role in maintaining the ecological balance of the region. It acts as a natural floodplain, absorbing excess water during heavy rains and releasing it during dry periods. The affective atmosphere of Obedska Bara holds the memories of the former river path of Sava. The affective traces of Obedska Bara expand into the idea of non(-place) as the riverbed holds the time while still water proliferates, holds and expands into the river and the land. The wetland belongs to the river and extends it at the same time, holding onto its future as a nesting place. Hillary Eklund argues that "the unfast quality of wetlands resists not only hard and fast distinctions between water and land, or between past, present and future, but also imperatives for technological progress, assimilation into rigid structures of time" (Eklund, 2020, 461). The affective atmosphere of wetlands underlines the density of textures existing between land and water, as well as the intensity of humidity in the air.

The bodies of water in the swamp extend to the concept of non(-place), of the aqua-terra; swamps challenge traditional notions of place as static, geographical and fixed. Instead, this place proliferates as a dynamic entity, inviting us to perceive the wetland as a liminal space: a threshold that sustains life, sequesters carbon and fosters biodiversity. It serves as a crucial habitat, a carbon sink and a nexus for life, illustrating the interplay between water, land and the myriad forms of life they support. In this way, swamps emerge as vital, dynamic ecosystems that transcend simple categorisation, embodying our world's fluid and interconnected nature. Swamps' affective worlds extend to the hauntings of the lands and waters simultaneously, writing stories of fluid encounters, migratory birds longing for homes and nests waiting for their return. The non(-place) of a lost old meander proves a reliable wet ground for the Sava River, as it supports the sustainability of its ecosystem. The texture of the meander moves with the bodies, urbanisation, extraction and colonial practices. Poetics of affect related to places, such as Obedska Bara, capture the longing of "the past leaks back through its own channels" (Eklund, 2020, 461). The multilayered sensorial aspect of a swamp reminds the collective space for many wet co-becomings to appear. We are exploring immersion - being in the midst of techniques, ways of seeing and sensing *affectus* as both a movement and a capacity to act within the swamp. Becoming with the swamp is the exploration of our human watery bodies within the wet, affective atmospheres of swamps. It examines the ways to relate, account for, write about and co-create with what swamps represent.

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Our visit to traces of swamps in Moonee Ponds in Naarm represented a way to engage with a bio landscape from material and critically creative ways of seeing the wetness of the abandoned site that is nowadays surrounded by shipment containers. By proposing a poetic language of the swamps, which we will introduce later in the text, and acknowledging the role of visitors on the lands of the Wurundjeri Woi-wurrung, we approached our creative and critical encounters as affective traces. In this process, we explored the haptic, sound and visual imprints of the wet atmospheres, engaging in more-than-human storytelling through visual, spatial and tactile means, while adopting perspectives that transcend traditional views of wetlands.

Swamps exist as "untimely matter" — objects that travel through time acquiring signatures of successive moments and allowing those signatures to resonate multiply in the present (Eklund, 2020, 462). We are responding to these multiplicities by listening to the material language of the swamps, following histories and wet traces and documenting stories. We are inspired by the "animacies" — to borrow the term from Mel Y. Chen (2012). They define animacies as

> new theoretical formations that trouble and undo stubborn binary systems of difference, including dynamism/stasis, life/death, subject/object, speech/nonspeech, human/animal, natural body/cyborg. In its more sensitive figurations, animacy has the capacity to rewrite conditions of intimacy. (Chen, 2012, 3)

The animacies follow our trajectories as we engage with the material language of the swamp, and in this understanding, affective traces are both temporal and spatial, reshaping memories. A language of animacies reimagines the intimate ways in which we can represent the various swamps we reference here. Chen suggests using spatial frameworks to discuss the "animate and animus, [ . . . ] a richly affective zone of mediation between life and death, positivity and negativity, impulse and substance; it might be where we could imagine the realm of animacy to reside" (Chen, 2012, 3–4). With affective poetics of wetlands, we want to present the rhythmical continuity of animacies and how both "history is located in spaces and places; geography is set in time (past, present and future), including the seasonal flowering cycles of wetlands and their wetting and drying seasonal cycles, and participates in a circular sense of time" (Giblett, 2016, 150). By locating animacies within affective zone Chen (2012) emphasises how spaces themselves become mediators of existence and in-between processes. This mediation, much like the wetlands' cyclical rhythms, blurs the distinctions between time and space, creating a continuum where beings, landscapes and histories interact. Through this lens, animacy is not confined to individual beings but extends across spatial and temporal boundaries, shaping how we understand life in its interconnected and evolving forms. The language of the swamp we develop offers a means to use affective and sensorial approaches to represent the multilayered aspects of swamps through time and space.

## A possible (swampy) praxis by many

While Emily Dickinson's poems embody the poetics of a swampy, indeterminate continuum (Parks, 2013), placing multiple environmental subjectivities in tandem, this praxis of liminality interests Author 2 as a form of poetic world engagement. One praxis in historical Chinese Culture is *shanshui* (山水, "mountain water"). Although symbolised as traditional culture, *shanshui* roots in environmental wonder, emphasising wild and carefree manners. It presents a poetic world where interpenetrating, constantly varying material force (called *Qi*, 氣) sets the world as a continuum (Wang, 2021). While *shanshui* invites the imagination of swampy places, like *Ze* (澤, "swamp"), one of the eight elements in I Ching, it represents the liminality and continuous interaction between mountain and water, rather than a literal swamp.

*Yinyun* (氤氳), a concept by historical *shanshui* painter Shi Tao (1642–1707), refers to the abundance of indeterminacy and all possible conditions imbued in the murky ink before one

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paints (Wang, 2021). Human figures, landscapes, plants and animals emerge from different intensities and local contexts within the primordial ink's continuous variability (Wang, 2021; Sha, 2013). From Author 2's practice of calligraphy and experiential insight, *yinyun* extends beyond the ink to the transformative state of *shanshui*, where ink, medium, brush and painter breathe together, allowing the painting and painter to emerge from the co-breathing events. Like Dickinson's poetic becoming of swamp, being in the state of *yinyun* allows attunement towards superimposed terrains, towards breathing patterns between mountains and water, ink and paper, painter and painting. *Yinyun* embeds the cosmos of myriad things in a diffusive state full of potential.

As a liminal space, *yinyun* fosters plural becomings. This in-between space, or *Jian* (間, *ma* in Japanese), signifies betweenness and liminality. Originally, it is depicted as a moon shining through a gate (Wang, 2021). In calligraphy, breathing is a form of *jian*, aligning breath with strokes. The blank space in *shanshui* painting is also a kind of *jian*, resonant and not empty. Shi Tao's *jian* creates a "listening painting," where the landscape reverberates with throbbing contours and vibrating dots, as described by art historian Susan Nelson in "*Picturing Listening: The Sight of Sound in Chinese Painting*'" in 1998 (as cited in Wang, 2021, 126). Similarly, Dickinson's swamp poetics embodies parataxis, juxtaposing phrases without immediate connection (Howarth, 1999, as cited in Parks, 2013, 9), while Barbara Hurd (2003) suggests that wetlands invite poetic thinking, as blank spaces in poems invite readers to craft multiple connections between lines. Wetlands, in their wild nature, disrupt established codes and delight in logical leaps and fragments, like *jian*. The in-between space in *shanshui* paintings hosts unspoken dialogue, enabling resonance across and outside the painting. This negative space of potentiality allows the imagination to flow, painting wild scenery with inter-humming valleys and vibrating archipelagos at the fringes of conventional terrains.

*Shanshui* practices have roots in ancient shamanism, where shamans, in a trance-like state called *huanghu*, transcend the five senses to enter a liminal state of resonance with the world's myriad things (Wang, 2021). This state, akin to *yinyun* in *shanshui* painting, allows shamans to connect with possible worlds, enabling sympathetic vibrations across bounded terrains. This liminal praxis is not exclusive in *shanshui*. Queer feminist Gloria Anzaldua calls the liminal state the *Nepantla*, a condition/state that she depicts in these terms: "Nepantla is that uncertain terrain one crosses when moving from one place to another." Whereas the Nepantleras (the in-between people) live in a hybrid borderland, neither fully Mexico nor the United States. They navigate multiple realities, shifting perspectives with fluidity and rejecting single identifications." (Anzaldua, 2015, 56). Anzaldua further explains the liminal state as such: "dwelling in liminalities, in-between states or Nepantlas, as Nepantleras cannot be forced to stay in one place, locked into one perspective or perception of things or one picture of reality" (Anzaldua, 2015, 82).

Anzaldua's account of the liminal transition, the Coyolxauhqui process, is a shamanistic journey where one gains new perspectives through symbolic death or dismemberment (Anzaldua, 2015, 29). This process involves shedding the ego, tuning into the "other" self and shifting subjectivities (Anzaldua, 2015, 28–29) — a process that I find akin to Dickinson's metaphoric transformation into a swamp. This attuning taps into *el cenote*, an inner river of knowledge. Similarly, in *shanshui* practices, one maintains a state of void, allowing an inward flux of matter to flow, making the *jian* fully engaging with the branching streams in the darkness. Entering this uncertain, swampy terrain facilitates the liminal phase, disintegrating and re-emerging rigid structures, imagining new paths.

From Dickinson's swamp poetics to *shanshui* paxis following mountain-water, from Anzaldua's *Nepantla* to the passage of blank space like *jian*, those that matter in the wild are not withheld in pre-existing taxonomies, not restricted by the medium of practices as they exist within fluid poetics, the liminal way they share. The socially anomalous defies categorisation, embraces fluidity and manifesting as a phenomenon of bordering. The anomalous carries the

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transformations of becoming, or crossings of multiplicities; their superpositions make them the line of flight, a transversal vessel crossing multiple realities, non/human, in/organic domains (Deleuze & Guattari, 1987, as cited in Wang, 2021, 153).

## The (wild) story of a white poplar clonal plantation

White poplar clonal plantations, scientifically known as a *Populus alba*, represent a mix of genetic engineering and ecological management systems. Established through the propagation of cuttings from a single, superior parent tree, these plantations are made through genetic uniformity, which enhances growth consistency and resilience against pests and diseases. The rapid growth rate of white poplars makes them particularly valuable for timber production and bioenergy, offering a renewable resource for economic utilisation and extraction purposes. Ecologically, these plantations contribute to soil stabilisation and water management and have been planted extensively in the dried soil among the wetlands. The huge plantations of white poplars are not considered to be classified as forests in most of Europe. However, in Serbia, due to large extractions of land and forests, the plantations of white poplars are considered an ecosystem of forests. The plantations of white poplars are used for carbon sequestration due to their rapid growth rate, extensive root systems and ability to thrive in diverse environmental conditions. The root systems of white poplars are deep and extensive, which allows them to store carbon not only in their above-ground biomass but also in the soil. This underground storage is essential for long-term carbon sequestration, as carbon stored in soil tends to be more stable and less susceptible to release. The carbon is in the soil, stuck and unseen by the human eye. White poplars are often used in afforestation (planting trees in non-forested areas) and reforestation (replanting trees in deforested areas) projects.

On the edges of the wetland in Obedska Bara, the plantation of white poplars has a high volume of biomass. The larger the plantation, the more it achieves its intended purpose of utilisation. The carbon stored in these trees is an invisible, secret ingredient in how humans fight climate change. The animacies of these beautiful giants are an intensive force in the bigger assemblage of ecosystems, acting as carbon containers in the time of the Anthropocene. The (wild) story of a white poplar here provides an animacy of stored carbon. In this image, the *affectus* is envisaged as the carbon's movement from and within bodies.

The carbon stored within the trees in the wetland contributes to the natural cycle of contamination, and it "becomes in this way an affirmation of relations of transformation where tension and change are not just inscribed into the embodiment but sustained beyond the power that desires to govern them" (Wolodzko, 2023, 6). Carbon stored in trees holds an affective trace of relations in the visible world where we rely on carbon storage for mass production and transportation in the capitalist world. The containment of carbon has been influenced by our understanding of our relations with wetlands and how we have utilised these places for extraction purposes. Being around white poplar plantations in swamps today means dealing with the unsettling notion of the materialities of our practices being stored, secured and contained by other living bodies. The carbon contamination from white poplars in mass plantations represents the living animacies of these practices, with a body serving as an affect, reflecting the interconnectedness of bodies that depend on one another.

## Be(com)ing like a swamp as poetic worlding

Be(com)ing like a swamp compels us to embrace uncertainty and listen to wildness. Such encounters do not necessitate a finalised aesthetic object, as the example of Tao Yuanming (365–427 AD) shows. This Chinese poet would converse with wild chrysanthemums by a broken bamboo fence (Okakura, 1906). These encounters' poetics emerge from the affective bonds inherent to the moment, rather

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than from the outcome of aesthetic objects. Similarly, Emily Dickinson's unlabelled herbarium reflects the understanding that wildness defies linguistic expression. Her poem "tell[ing] one's name—the livelong June—/To an admiring Bog!" (Fr260, quoted in Parks, 2013, 9) captures her deep connection to swamps, which she found both polarising and indescribable. Dickinson's herbarium conveyed her immersive experience of the wild, offering material traces of her encounters with nature. This poetic force extended to her writing on environmental subjectivity and fluctuating gender, embodying the wildness of the swamp.

As a northern child who moved south with her parents at eleven months old, Author 2 grew up near wetlands along the coast. The mangrove forests, bodhi trees and water birds were familiar sights, as was the rapidly encroaching concrete jungle. Weekend trips to the wetlands and mangrove reserves were exciting, with the muddy scent, fig tree roots and birdsong dissolving the routine of everyday life. This experience shaped her fluidity, embracing the multiplicity of aerial roots and the swamps' in-between states. The wetlands span the borders of Hong Kong and Shenzhen, known as Mai Po Reserve in Hong Kong and Mangrove Reserve in Shenzhen. Crossing these borders since teens, she experienced the seepage of cultures and identities. The swamps' boggy zones, familiar bird calls and branching roots created a rhythm of uncertainty and paradox that defined her life. These liminal transitions compelled her to walk between worlds, listen to unheard murmurs and embrace the potential of wildness.

Beyond its scientific abundance, swamps' disorienting space embodies the living, breathing world(s) — a terrain of continuous transformation. While enduring disorientation can be unsettling and frightening, it is also rich with potential, (re)formulating new worlds. The significance of liminal spaces and people lie in their ability to live and cross multiple worlds simultaneously. Engaging with swamps teaches us the rhythms of living terrains, breathing in and out of each other. The nuances of affective dynamics, the freshness of change and the excitement of being reborn in the wild, thick experience all spring abundantly. Becoming one with a swamp allows us to embrace the fecundity of liminality and escape the "either-or" mindset, dwelling in multiplied, extralinguistic matters, always imminent in the ever-changing world.

## The swampy language

Instead of drawing conclusions about swamps, we propose a list of poetic expressions and language that encourages us to think, write and create in multiplicity and transversality, continuously (re)wilding solid structures, dismantling binary oppositions and reshaping syntax. More than being a lexicon of the swamp, the expressions seek to act as portals, bridges, material-linguistic trajectories inviting readers to engage with the multiplied, textured, multisensorial being of swamps, opening poetic forces that are (re)wilding our thinking and writing. Our affective experiences with swamps continually exfoliate our existing modes of expression, where the emerging texts and phrases from such encounters with swampy matters aim to open up imaginations towards wetlands as diffuse, living, co-breathing terrains in constant transformation. Moreover, we propose exploring more-than-human animacies through expressions of how wetlands contribute to knowledge creation, highlighting new ways of thinking and learning that invite fluid and multisensorial experiences in the context of climate loss.

We invite readers to use the proposed phrases and affective expressions and to continue co-creating material and imaginative worlds of fluid methodologies, as proposed with the swamps.

*Evaporating (emanating)* — the rhythm of a swamp; a diffusive state full of potential and energy; life force of the wetland as a body of water.

*Containment* — swamps' ability to store carbon makes them significant natural containment systems, playing a crucial role in mitigating climate change by capturing and sequestering carbon dioxide from the atmosphere, making them silent regulators of the Anthropocene. The materialities of human practices are being stored, secured and contained by other living wetland bodies.

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*Stratified (plural universe)* — a swamp's existence in multiple forms and states, reflecting the idea of a pluriverse. It highlights a swamp's ability to embody and express diverse materialities (land — water; wet — dry) simultaneously.

*Liminality* — crossing over *aqua* and *terra* fosters liminal (non-)place between worlds, making possible the paradoxical superposition of what is considered opposites.

*Wilding* — inspired by Emily Dickinson's swamp poetics, wetlands, in their super-positional wild nature, serves as an (un)staging ground, disrupting rigid structures and inviting new possibilities of worlds otherwise.

*Be(com)ing (with) swamp* — embracing the escape from an 'either-or' mindset to dwell in multiple, extralinguistic matters. Such becomings are perhaps always already imminent in the constantly exfoliating world.

*The whisper of swamps* — influenced by Jenny Sinclair's notion of the ghost of the Batman's swamp that has continued to linger in surrounding arrears after its drainage (Sinclair, 2010), the whisper of swamps refers to the persisting affect of the swamp even in its repressed state. The murmurs leave traces of colonial violence towards wildness.

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## References

**Anzaldúa, G.** (2015). *Light in the dark/Luz en lo oscuro: Rewriting identity, spirituality, reality*. Duke University Press.

**Åsberg, C., & Braidotti, R.** (2018). Feminist posthumanities: An introduction. In C. Åsberg & R. Braidotti (Eds.), *A feminist companion to the posthumanities* (pp. 1–22). Springer.

**Batman, J.** (1835). Journal 10 May - 11 June, Manuscript, State Library Victoria.

**Canning, S., Thiele, F., & Mitchell, M.** (2010). *Indigenous cultural heritage and history within the Metropolitan Melbourne Investigation Area*. A report to the Victorian Environmental Assessment Council. https://www.achm.com.au/assets/files/Indigenous_Cultural_Heritage_and_History_within_the_VEAC_Melbourne_Metropolitan_Investigation_Area.pdf.

**Chen, M.Y.** (2012). *Animacies*. Duke University Press. https://doi.org/10.1215/9780822395447.

**Deleuze, G., & Guattari, F.** (1988). *A thousand plateaus: Capitalism and schizophrenia*.(1st ed.). University of Minnesota Press.

**Deleuze, G., & Guattari, F.** (1994). *What is philosophy?* Columbia University Press.

**Eklund, H.** (2020). After wetlands. *Criticism*, *62*(3), 457–478. https://doi.org/10.13110/criticism.62.3.0457.

**Giblett, R.** (2016). Lost and found wetlands of Melbourne. *Victorian Historical Journal*, *87*(1), 135–156.

**Haraway, D.J.** (2016). *Staying with the trouble: Making kin in the Chthulucene*. Duke University Press.

**Hickey-Moody, A.** (2013). Affect as method: Feelings, aesthetics and affective pedagogy. In R. Coleman & J. Ringrose (Eds.), *Deleuze and research methodologies* (pp. 79–95). Edinburgh University Press.

**Hurd, B.** (2003). *Stirring the mud: On swamps, bogs, and human imagination*. Mariner Books.

**Linnæus, C.** (1735). *Systema naturæ, sive regna tria naturæ systematice proposita per classes, ordines, genera, & species* (pp. 1–12). Haak.

**Okakura, K.** (1906). *The book of tea*. Fox, Duffield & Company.

**Oppermann, S.** (2023). *Blue humanities: Storied waterscapes in the Anthropocene*. Cambridge University Press.

**Parks, C.** (2013). The swamps of Emily Dickinson. *The Emily Dickinson Journal*, *22*(1), 1–29. https://doi.org/10.1353/edj.2013.0004.

**Presland, G.** (2014). A boggy question: Differing views of wetlands in 19th century Melbourne. *The Victorian Naturalist*, *131*(4), 96–105.

**Rousell, D., & Cutter-Mackenzie-Knowles, A.** (2023). *Posthuman research playspaces: Climate child imaginaries*. Routledge.

**Rousell, D., Gallagher, M., & Wright, M.P.** (2022). Becoming listening bodies: Sensing the affective atmospheres of the city with young children. In N. Williams & T. Keating (Eds.), *Speculative geographies* (pp. 251–267). Palgrave Macmillan. https://doi.org/10.1007/978-981-19-0691-6_16.

https://doi.org/10.1017/aee.2026.10151 Published online by Cambridge University Press

**Sava Parks Network** (2024). Obedska Bara special nature reserve. http://www.savaparks.eu/sava-parks-4282
**Sha, X.Q.** (2013). *Poesis and enchantment in topological matter*. MIT Press.
**Sinclair, J.** (2010). *When we think about Melbourne: The imagination of a city*. Affirm Press.
**Sornig, D.** (2018). *Blue lake: Finding Dudley Flats and the West Melbourne Swamp*. Scribe Publications.
**Vines, G.** (1999). *Dudley Flats: Archaeological investigation*. Melbourne City Link Authority; Melbourne's Living Museum of the West.
**Wang, J.** (2021). *Half sound, half philosophy*. Cambridge University Press.
**Wołodźko, A.** (2023). *Affect as contamination: Embodiment in bioart and biotechnology*. Bloomsbury.

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**Bixiao Zhang** is a digital artist and PhD candidate at RMIT University living in Naarm(Melbourne). Her practice-led research, a fluid entity termed "The ElectroPoetics," proposes a performative approach to digital media and algorithmic architecture, driven by the convergence of Chinese Shanshui(mountain-water) Thought, feminist eco-poetics and aspects of electro-dynamism. As a praxis of care, her performative digital media approach situates dynamic digital substrates for interspecies resonance and polyphonic transformative events. Bixiao won the 2021 Dean's Award at RMIT for her research project; she mainly engaged in public art projects and residencies in the Asia Pacific before 2020.

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