

antennae

THE JOURNAL OF NATURE IN VISUAL CULTURE
AUTUMN 2025

gardening

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THE JOURNAL OF NATURE IN VISUAL CULTURE

edited by Giovanni Aloï

Antennae (est. 2006) is an independent, hybrid, peer-reviewed journal dedicated to exploring the intersections of nature and visual culture. Entirely free to the public, *Antennae* operates without institutional funding, grants, or philanthropic support. Its format and ethos are shaped by the principles of knowledge transfer and widening participation, offering an inclusive platform for emerging ideas and voices often overlooked by mainstream academia.

Independent publications have long been associated with originality, irreverence, and innovation: traits that have defined *Antennae*'s vital contribution to what will be remembered as the non-human turn in the humanities. Our inaugural issue launched alongside the rise of human-animal studies, a field that has since become a cornerstone of contemporary academic inquiry. From the outset, *Antennae* has amplified the voices of artists and scholars whose work—then considered marginal—has since helped shape new academic territories such as the environmental humanities and critical plant studies.

Over nearly two decades, *Antennae* has served as an incubator for pioneering conversations, offering one of the first international platforms for serious engagement with non-human agency, ecological aesthetics, multispecies ethics, and vegetal thought. At a time when these topics were still struggling for legitimacy, the journal created a space where experimental methodologies and speculative scholarship could take root and thrive, helping to transform the landscape of contemporary humanities research.

In January 2009, the formation of our Senior Academic Board, Advisory Board, and Network of Global Contributors solidified *Antennae*'s role as a leading resource in environmental studies and visual culture. To this day, no other journal offers artists and scholars the opportunity to publish full-color portfolios and richly illustrated essays at no cost to themselves or to readers. Markedly transdisciplinary, *Antennae* fosters dialogue across the arts and sciences, uniting scholars, artists, curators, activists, and students in a shared pursuit of ecological and aesthetic inquiry.

At a time when the academic publishing industry increasingly exploits contributors, charging exorbitant article processing fees, paywalling content, and monetizing visibility, *Antennae* remains steadfast in its commitment to open-access, ethical publishing. We do not charge authors to publish and never ask readers to pay for access. Our model is rooted in mutual respect, intellectual generosity, and a belief that knowledge—especially in service of ecological awareness and justice—should be freely shared.

For more information or to access past issues, please visit www.antennae.org.uk. Contact Editor-in-Chief Giovanni Aloï at: antennaeproject@gmail.com

Front cover: **Alexandra Daisy Ginsberg**, *Pollinator Pathmaker: iMYHWtLR4fjkmhKviXEs22 (Pollinator Vision, Early Summer)*, 2025. Courtesy the artist © Alexandra Daisy Ginsberg Ltd
Back cover: **Alexandra Daisy Ginsberg**, *Pollinator Pathmaker: iMYHWtLR4fjkmhKviXEs22 (Human Vision, Early Summer)*, 2025. Courtesy the artist. © Alexandra Daisy Ginsberg Ltd

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A vibrant, close-up photograph of a garden. The scene is filled with various plants, including tall, thin green stalks with small purple buds, and clusters of larger, funnel-shaped purple flowers. The background is a soft-focus mix of green leaves and purple blossoms, creating a rich, textured environment. The lighting is bright and natural, highlighting the colors of the flora.

gardening



12

Michael Pollan Second Nature: A gardener's education

in conversation: Michael Pollan and Giovanni Aloï

First published in 1991, *Second Nature: A Gardener's Education* anticipated many of the philosophical and ecological insights that would later shape the field of critical plant studies. In this conversation, Michael Pollan reflects on how the book's central questions about human agency and vegetal autonomy have evolved.



20

Performing the Ragged Garden

text and images: Carol Freeman

In 2020, a guerrilla gardening project began in the corner of an apartment block adjacent to a hotel carpark. *The Ragged Garden* is planted with 'uncultivated' shrubs and rushes that grew on the site before European colonisation, and flowers that may have grown in the forgotten garden of the Ragged School that stood there later.

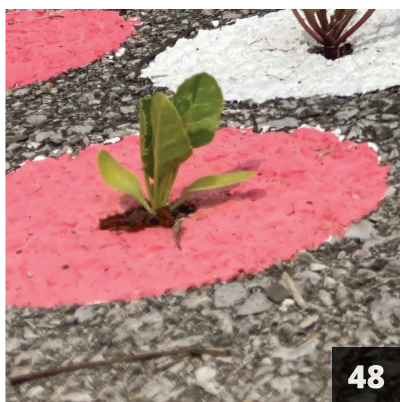


36

Gardens as gifts

in conversation: Barbora Lungová
and Edith Jeřábková

Artist and gardener Barbora Lungová speaks with curator Edith Jeřábková about the growing presence of gardens in contemporary art. Lungová traces this shift from early painterly practice to her current projects, such as *The Rainbow Garden* and *The Most Beautiful Parking Lot in Kyjov*, where cultivation becomes both artwork and social action.

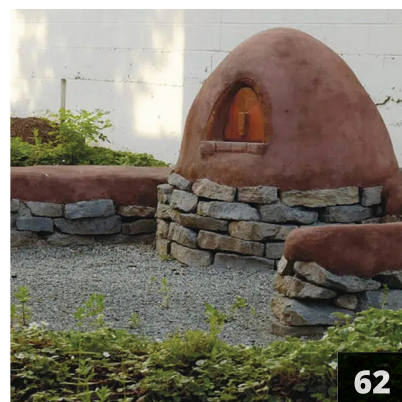


48

The question of the impervious garden

text and images: Dan Feinberg

Since 2018, I have worked with root vegetables to break up asphalt and test their ability to aid in water infiltration, soil restoration, and cooling in selected paved sites across the eastern United States.



62

T'uy't'tanat Cease Wyss's native gardens

in conversation: T'uy't'tanat Cease Wyss
and Giovanni Aloï

In this conversation, artist and ethnobotanist T'uy't'tanat-Cease Wyss discusses her community-based ecological projects *New Growth* and *A Constellation of Remediation*. Rooted in Indigenous permaculture, her practice blends art, education, and land stewardship, empowering youth.



79

Radesti garden

text and images: Irina Botea Bucan

Jon and I started to plant in 2020, on the second day of the pandemic, unplanned, an urgent act, to an unknown and famine-predicted future. The text presents a gardening artist's perspective as a social and everyday practice of learning how to participate in a common-reciprocal process of living with plants, animals, and humans.



94

Alexandra Daisy Ginsberg: Pollinator Pathmaker

in conversation: Alexandra Daisy Ginsberg
and Giovanni Aloï

Alexandra Daisy Ginsberg talks about *Pollinator Pathmaker*, her algorithmic, more-than-human artwork. Drawing on ethology and simulated pollinator vision, Ginsberg devised an "empathetic algorithm" that optimizes plantings for pollinator diversity rather than human taste, decentering the human as insects become audience.



116

Imagining a multi-species garden

text: Lorraine Shannon

In Australia, bush fires, Covid-19 and climate change have given rise to a gnawing sense that a shift in how we care for country is required. This includes how we garden. Gardeners have the opportunity to reimagine obligations to the natural world and implement gardening as a crucial aspect of creative coevolution with all species.

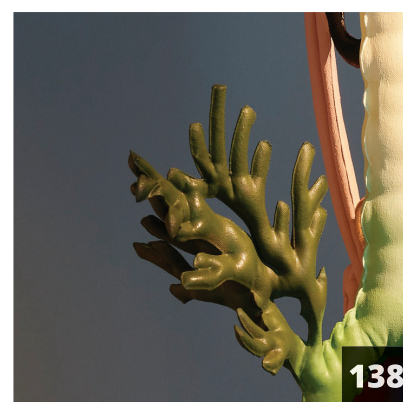


124

The garden at Casa Azul

text: Mariana Menezes

This article examines botanical symbolism in Frida Kahlo's art and its material expression in the garden of Casa Azul. It argues that Kahlo's mytho-poetic use of vegetation forms an aesthetic-political framework of resistance, intertwining body and territory in a decolonial counter-narrative.



138

Plant signatures, goodness, and the dose

text: Prudence Gibson and Sigi Jottkandt
images: Caroline Rothwell

This essay focuses on the Australian artist Caroline Rothwell whose engagement with the Doctrine of Signatures helps draw connections between the doctrine's religious underpinnings and contemporary interpretations.



151

Planning a natal garden

text: Martina Hynan

In planning a natal garden Martina Hynan strives to generate an expanded understanding of natality that reflects the interconnectedness of people with ecology. Such an environmental perspective on birth acknowledges the complex interdependency of human and non-human needs in a multispecies world.

editorial

Giovanni Aloi

Every year it begins the same way. A promise to myself, half stern and half naïve: *I don't need any more bulbs this year.* I utter it with the confidence of someone who believes they are finally in control of their impulses, someone who has learned to resist the seductions of glossy plant catalogues that haunt the mailbox throughout August. But already, even as I form the sentence, the other half of my mind is loosening the hinges on a familiar door. A whisper stirs: *Of course you do...* It always starts softly, the way desire does, brushing lightly against the edges of reason until reason gives way entirely.

September arrives with its subdued fanfare: asters flashing their dusty blues like sudden, ecstatic thoughts; rudbeckias swinging in the cooling breezes like little suns about to fade. And with it, the mail slot sighs under the weight of more bulb catalogues, those seasonal scriptures of potential and promise. Those pages, crowded with portraits of blooms at their peak, are portals into the future. They speak of renewal with the confidence of someone who has lived through countless winters and returned each time to tell the tale. Your pulse quickens in that anticipatory way that marks the beginning of a pilgrimage. And before long, you place an order... and then another. And then one more for good measure.

The bulbs begin to arrive with impeccable timing, just as your autumn schedule buckles under deadlines, travel, events, and the avalanche of coursework grading. They land on the doorstep like emissaries of another world, reminding you of your obligations not just to work but to wonder...and that wonder often requires work too. You promise yourself you'll start planting after the next deadline, after that trip, after that opening. But the natural clock is ticking. It does not wait patiently at the door. In the wind, in the early darkening afternoons, in the sudden fragrance of leaf mold rising from the soil, you hear the call to kneel down and begin again.

And so, through blustery winds, the first snow flurries and the frigid air that stings the eyes, you plant. Knees damp, boots heavy with sticky mud, gloved hands aching as they get numb. Nearly 2000 bulbs this time: hyacinths, tulips, garlic, fritillaries, irises, daffodils, anemones, scilla and more. It feels excessive. Yet it also feels necessary, almost sacred. In a world that unravels uncertainty by the hour, you bury these living certainties into the moist of the soil's darkness. One bulb at a time. Pagan prayers, beads of a disjointed rosary for a secular age. We kneel not before altars but before the promise of almighty spring. We chant silently through our breath, in the rhythm of digging, releasing, and covering. To many, these gestures may just look like gardening, but they are much more. They are acts of faith without doctrine. You plant them in cold earth not because you have proof but because you have trust. Trust in cycles older than human memory, in a choreography of dormancy and emergence that has unfolded across millennia.

In this sense, gardens are secular sanctuaries; quiet spaces where belief blooms. If experienced from this perspective, with your knees firmly planted into the ground, a garden is not escape but rootedness. To kneel in mud is to acknowledge our shared materiality; to feel the weight of soil is to feel the world's pulse in your palm. There is no

abstraction here. Only the immediacy of touch, the intimacy of tending, the humbling recognition that your actions, small as they are, will ripple into seasons you have not yet lived. In caring for a garden, you practice a form of spiritual attention. You become attuned to the imperceptible shifts of temperature, the slow thickening of buds, the way frost glitters like a thin veil drawn over sleep. A garden trains you to see time differently: less as a linear march and more as a continuous folding, an imbrication of past and future in each moment of presence.

Each bulb buried deep in November becomes a luminous thought lodged in cold darkness. Imagine them down there: small, plump, already waking. In the chilled soil, they are beginning to stir, imperceptibly at first, pushing out roots, strengthening their grip onto a world they cannot see. In their quiet determination lies a lesson: transformation requires commitment, patience, and faith.

Perhaps this is why planting bulbs feels like an act of resistance. At a time when uncertainty has become a daily companion and faith in the future feels fragile, bulbs offer a form of vegetal certainty. *Spring will come. These flowers will bloom.* It is not hope in a metaphorical sense; it is hope with roots, with substance, with the thick fleshiness of hyacinths and the papery skins of daffodils. The garden, then, is a site where the spiritual and the material converge, where the gesture of planting is simultaneously one of resistance, tenderness, and imagination.

As the big snowstorm approaches, you tamp down the last patch of earth. The world may be unpredictable; institutions may falter; regimes might fall. But bulbs carry within them a commandment older than human despair: *growth*. Undeterred, silent icons of infinite power; in their earthly persistence, they teach us how to inhabit time beyond the structures of capitalist beliefs: how to wait, how to endure, how to imagine a spring we cannot yet see.

And so, we keep planting. We keep kneeling. We keep worshipping the only power that truly matters.

This issue of *Antennae*, and the two that preceded it, are dedicated to gardening as creative process. We need to take gardens very seriously as legitimate artistic sites and media—organic tissues generated by resilient and dedicated nurturing capable of uprooting our disciplinary and institutional certainties to show us how we can reimagine art from scratch.

My gratitude goes to all the contributors to this issue, to *Antennae's* academic board for its ceaseless support and expertise and to everyone else who has made this exploration possible.

Giovanni Aloi
Editor in Chief of *Antennae*





The garden teaches us that we can share space with plants, animals, and people if we respect their needs and work together.

Michael Pollan Second Nature: A gardener's education

First published in 1991, *Second Nature: A Gardener's Education* anticipated many of the philosophical and ecological insights that would later shape the field of critical plant studies. In this conversation, Michael Pollan reflects on how the book's central questions about the boundaries between nature and culture, human agency and vegetal autonomy have evolved over the past three decades. Written before "Anthropocene" and "plant intelligence" entered common discourse, *Second Nature* remains a foundational text for thinking through the ethical and aesthetic implications of gardening as a dialogue with the nonhuman world rather than a mastery over it.

in conversation: **Michael Pollan and Giovanni Aloï**

My great-grandmother, Maxine Clark, was a botanist. Her garden was a vibrant ecosystem that blurred the lines between cultivated and wild spaces. She grew many flowering plants and collected specimens from her garden during her graduate research. Once, her neighbor complained about the height of plants in her garden, reporting it to the city as a "yard full of weeds." Maxine calmly named each species when the city came to inspect, and they left without incident. For Maxine, the garden was not merely a space for aesthetic pleasure, but a place of interconnection, reflecting the dynamic relationship between humans and the natural world.

I feel this kinship with flora deeply. Childhood memories interwoven with textures and scents – prickly purple thistle in the field behind the house, delicate butterfly's wings on milkweed, ripe tomatoes plucked from the garden. My artistic practice explores the interplay between identity and the American landscape from a queer, female-bodied, ecological perspective. I challenge the traditionally masculine framework of landscape imagery while focusing on the fluidity of memory and the ever-changing nature of the land. I investigate interstitial zones where the natural, industrial, urban, and domestic intersect as sites of profound transformation and reflection. On a broad scale, my work asks the viewer to consider how the degradation of the land relates to the erosion of family and community.

My family's history is intertwined with the American landscape. My great-grandparents, both scientists and artists, fought to protect the Buffalo River, establishing it as the first National River in the United States. This legacy inspired me to explore the power of art to effect social change and to investigate connections between family and the environment. Inspired by my great-grandmother's research, I revisited the locations where she collected plant specimens as a graduate student, finding these places to be the aforementioned interstitial zones. Thus, I

investigate these types of spaces when creating photographs, considering them in relation to memory. I represent the landscape as one shared across multiple generations and utilized for varied purposes.

My work draws inspiration from the ecological perspective of my family. I am fascinated by the interplay between science and art, particularly in exploring the Anthropocene. I document the resilience of plant life, and its ability to reclaim the most human-dominated spaces. These images serve as metaphors for the complex dynamics between generations – bonds of connection interwoven with inevitable disconnections. With my work, I ask the viewer to consider how a landscape can change over time, and how that might impact not only ecology but also human relationships to the land. As Frank Gohlke writes in his essay, "Measure of Emptiness", "...asking simple questions about a common object [in a photograph] can open up the human history of an entire region". By presenting botanical objects in the landscape, my photographs bring about the types of queries that Gohlke discusses. My work elicits a sense of remembrance that is specific to a particular area. Frank Gohlke was a member of the New Topographics Photographers. While my work is in dialogue with these artists, who often presented a more distanced, objective view of the landscape, I strive to cultivate a more intimate, personal approach. I am drawn to the nuances of the land, seeking to create new, queer visions. By focusing on the intricate interplay between botanical elements and the urban environment, I invite viewers to contemplate the profound and enduring impact of human activity on the landscape.

My research also delves into my family's archive, a collection of photographs, documents, and other artifacts meticulously gathered by my family, including botanical specimens. In my selection and manipulation of images from the archive, I question their identities and histories in relation to my own. I make connections between the past represented in the family archive and the present (and possible future) displayed in the images I create, inspiring a dialogue with the imagery.

Like my great-grandparents, my mother is an avid photographer, serving as a link between myself and earlier generations. She is also an incredible gardener and many of my earliest memories are of sitting in the dirt while she planted strawberries. Focusing on my great-grandmother and mother allows me to explore the broader relationships between gender, archiving, photography, and scientific inquiry within my matrilineal lineage. In an article entitled "'My life is in that box'", author Jeremy Seabrook writes about the act of collecting and remembering the family archive as "an art of women, an outcrop of lived and felt experience; an evocation of the throng of people whose lives have touched and been touched by theirs; a celebration of memory..." While photography has been embraced by many in my family, women have consistently played a pivotal role as keepers of family stories. By utilizing the family archive in my own artistic practice, I am both honoring this tradition and critically examining its underlying assumptions. Sadly, much of my family archive was destroyed in a fire in 2021; I wonder, how does one examine materiality when it has been turned to ash? I have not yet found the answers.

As I write this in early January, I look out the window of my classroom in California, onto a manicured lawn. Plants that "don't belong" in

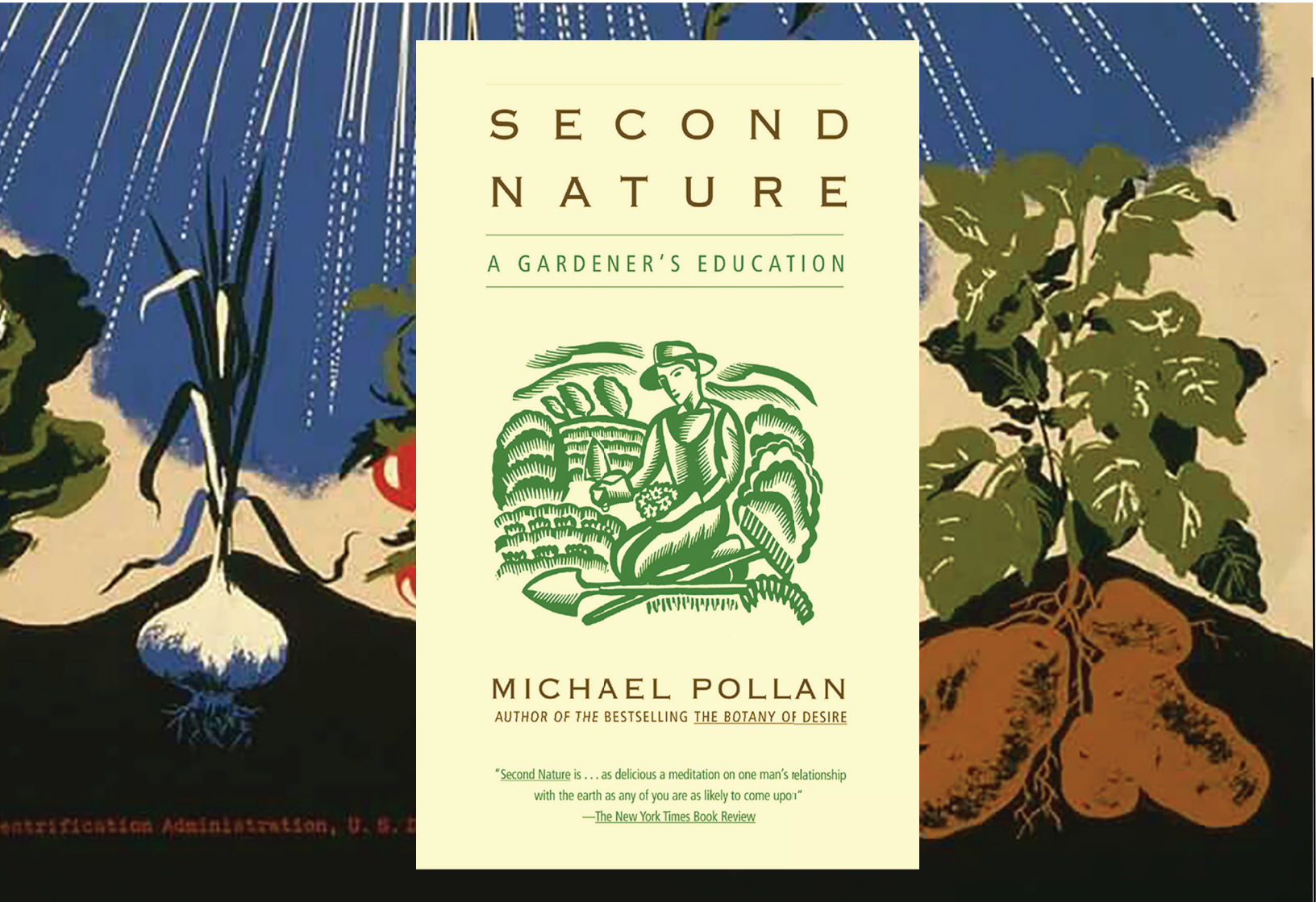
this controlled environment continue to thrive. The California poppy is just starting to sprout from the ground again. I want to write about the many "gardens around us," but all I can think about are the flora and fauna on fire just hours south in Los Angeles, interstitial zones ablaze. It always seems to be about property loss— a school, a movie theater, a home; what about the trees, the ferns, the flowering plants, the mosses? And all the fauna? In pursuing Maxine, I've found a relationship to the land that seeks not to dominate, control, or destroy, but to treasure, preserve, and protect. Maybe if each of us starts in our own gardens, planting pots, or a patch of grass along the sidewalk, we can put out the flames of the climate crisis.

Giovanni Aloi: When *Second Nature* was published in 1991, the idea of turning to gardening as a serious lens for cultural inquiry was highly pioneering. What was the intellectual climate at the time that led you to see gardening past the clichés of recreation and as a rich subject for philosophy and cultural critique? What first prompted you to write about gardening in this way?

Michael Pollan: A couple of things were going on in the late 1980s when I began to garden and write about gardening. Critical theory has come to environmental studies. William Cronon, the environmental historian, was a friend, and he had a conference, later turned into a book, with a bunch of theoretically inclined scholars who were asking deep questions about seemingly essential categories like wilderness. A critical eye was being brought to (essentialist) ideas about nature and culture, especially that binary, that had gone unquestioned in the long history of American writing about nature. The garden, I realized, was a better place to explore these issues than the wilderness, which is where Americans historically have gone to "think about nature" and their place in it. You could see the history, the admixture of culture in something like a hybrid seed. I was also reading people like Richard Rorty, who I think sensitized me to the fact there might be politics lurking in ideas like 'alien species.' Cronon's own work – changes in the land—had already give me a lens through which to see how historical the new England landscape really was, that there were all sorts of traces of past human –both indigenous and settler—involvement. Nothing was as it seemed. We were so deeply invested in nature as a contrast to culture, so it had to be unchanging, eternal and untouched.

GA: Looking back, what kinds of resistance, if any, did you face when proposing a book that merged memoir, horticulture, philosophy, and cultural criticism? Were there moments when you questioned whether gardening could carry such conceptual weight?

MP: Nope. From the first essay I published, "Nature abhors a garden", in *Harper*, which became the chapter by that name in *Second Nature*, I got a very supportive response, and invitations to write about gardening from other publications, including *The New York Times*. The time was right. Academic theory was finding its way into the mainstream. Plus, I don't write like a theorist, thank god!



Michael Pollan

Second Nature, Grove Press, 1991

GA: The academic field of critical plant studies has since emerged, focusing on many of the philosophical and ethical concerns you first mapped out in *Second Nature*, from questions of plant agency to the politics of landscape and the human-centric view of nature. How do you feel about this surge of academic interest? Do you see it as a validation of your early work, and have any of these contemporary theorists changed your own perspective?

MP: I'm not following it super-closely, but I find this new interdisciplinary attention to plants and gardens gratifying. I don't take credit, however.

GA: Your later works often grapple with altered states of consciousness. In some ways, *Second Nature* foreshadows this trajectory. Do you see gardening as an early site of altered perception or metaphysical inquiry in your own intellectual journey?

MP: Not long ago, I had to reread *Second Nature*, for an audio book (audio books didn't exist in 1991!), and I was struck by how many of the ideas I've work with in the decades since are right there, albeit in a germinal form. I'm afraid I haven't had a new idea since 1991. I definitely touch on conscious-

ness change, agriculture and food, nutrition, it's all there, waiting for elaboration.

GA: If you were to approach *Second Nature* as a new project today, how would the book's central questions and arguments change? Considering the profound challenges of climate change, the rise of industrial agriculture, and new technologies like genetic engineering (which you already explored in your book), as well as more recent discourses on land ownership and stewardship, what new chapters would you feel compelled to write, and which of the old arguments might you feel the need to revise or abandon entirely? One of the most memorable chapters in *Second Nature* reflects on your visit to Cathedral Pines after it was devastated by a storm. Your critique of hands-off conservation, of the fetish for "untouched" wilderness, was provocative then, and it remains sharply relevant today. In the thirty-four years since, how has your thinking about conservation evolved? Do you still hold that disturbance and intervention can be generative, or have today's accelerating environmental crises shifted your sense of what should (or shouldn't) be left alone?

MP: If I were writing it today, climate change—which does figure in the chapter "the idea of a garden"—would play a larger role. So would the soil, which deserved a whole chapter, and plant neurobiology—the study of plant intelligence, which wasn't a thing back then. I think some of the prose now strikes me as showy, befitting a young writer trying to prove himself—overly poetic and a bit strained. I think I would be more sensitive to the indigenous influence on the American landscape (though there's a fair amount of that). And, thirty-five years later, I'm less critical of the decision to leave cathedral pines alone. I've been watching it decompose over all these years, and while I miss the human access to this place, I can appreciate the riot of nature and succession taking place, and nowhere near any "conclusion."

GA: While *Second Nature* was never meant to be a gardening manual, it contains a wealth of practical wisdom sometimes tucked into lyrical reflections, sometimes delivered with disarming candor. One passage that stayed with me is your caution against the temptations of autumn perennial sales: "the plant you'll buy again in the spring." I confess I've fallen into that trap more times than I care to admit. How much, in your view, could *Second Nature* be understood as a gardening manual of an apocryphal kind?

MP: Well, if I were redoing it now, I would acknowledge all the mistakes the book chronicles! The Norway maple I planted has been a disaster. It's a terrible variety with a sour shade, inhospitable to anything growing near it, and lousy fall color. I should have done more research. Several trees I planted have turned out to be problems. No one should take that book as an authoritative how-to. It is very much the work of an amateur!

GA: One of the key points you address in your book has become central to current critical plant studies discourses. The act of gardening is profoundly tied to a slower, more deliberate sense of time, a theme you touch on extensively. In a world now dominated by instant gratification and digital speed, do you think the garden offers an even more vital and necessary antidote

today than it did in 1991 when the internet hadn't changed our lives yet and smartphones did not exist? What can the practice of gardening teach us about patience and presence in the 21st century?

MP: Yes, gardening is a great antidote to all our electronic distractions, and the activity is more relevant and necessary now than ever before. At the same time, smartphones can help in the garden in identifying plants and birds, for example. We also know that exposure to soil and its microbes is necessary to our health. So, I might have spoken more about the importance of the microbiome and how we take the garden into ourselves. My microbiome is different because I'm a gardener—another engagement with nature we seldom think about. (and have only learned about recently. The term 'microbiome' wasn't coined till 2001.)

GA: There's an underlying ethical tension in your book between domination and collaboration, between gardening as mastery and gardening as dialogue. How has your own ethical position evolved, especially in light of contemporary eco-philosophies that call for more-than-human solidarity?

MP: I've since written about animal rights and welfare (see *Omnivore's Dilemma*, 2006), and I look back on my own efforts at dominance with some embarrassment. Though I still hate woodchucks with a passion.

GA: Your book is, at its heart, a deeply personal account of your own gardening journey. Three decades later, do you still garden with the same intensity and commitment you described? Has your relationship with your own garden changed from a site of philosophical inquiry to something else: perhaps a place of comfort, an escape, or simply a space for quiet enjoyment?

MP: I garden on two coasts now, and the contrast is always interesting, but with my attention so divided, I'm much less deeply engaged in either place. I have less time for gardening. Many of my perennial borders in Connecticut have been simplified or turned over to shrubs. I look forward to a time when I can stay in one place and be more deeply involved, but I would say my commitment has diminished as my life got busier. I'm hoping that will change. But yes, in the garden today you think less and be more: a place to be present, to relax, and to simply be without getting too ambitious.

GA: One of the quietly radical moments of *Second Nature* emerges towards the end as you attempt to define what a gardener is in 10 points, not simply as someone who grows plants, but a figure negotiating ethics, aesthetics, and agency in a dynamic landscape. Do you still stand by those early formulations? Are there any definitions you might revise, remove, or expand in light of how gardening as both practice and metaphor has changed in the past three decades?

MP: Honestly, I don't remember the ten points, but I do believe all those issues are at stake in the garden, whether we are aware of them or not. One of my goals was to make us more conscious of all that is at stake when we garden.

GA: You've always been a keen observer of the natural world, and a lot of the book's wisdom comes from the direct lessons the garden taught you. What's the most surprising or profound thing you've learned from your garden that you couldn't have learned from a book?

MP: So many things. That domination over the short term might work, but ultimately it is bound to fail. Nature gets the last word.


GA: Your chapter on mowing is a particularly incisive and memorable part of the book, framing the weekly chore as a symbol of our society's obsession with control and order. Thirty-four years later, with the omnipresence of mowed lawns still dominating our landscapes, do you believe our relationship with the lawn is still as fraught and symbolic as you argued? How has the culture of mowing changed, if at all?

MP: I think this is a conversation that has changed—there's a lot more openness in America to other, non-lawn approaches. In Berkeley, you hardly ever see front lawns, and the front gardens are riotously different, one from another. I think the stranglehold of the American lawn has weakened—it's still there, but there is much more dissent and experimentation than there was when my article "Why mow?" was published in *The New York Times* (1989).

GA: Finally, what would you say to a younger generation of gardeners, artists, and scholars for whom the garden is now both a material site and a metaphor for politics, care, decolonial practice, and resistance?

MP: The garden is a rich laboratory for exploring all these issues and more. Young writers should not be daunted by what has already been done—it's a drop in the bucket, truly. So don't let the anxiety of influence intimidate you. Find a plant and contemplate your own garden.

Michael Pollan is an American author, journalist, and professor whose work has profoundly shaped contemporary understandings of nature, food, and culture. He is the author of influential books such as *The Botany of Desire*, *The Omnivore's Dilemma*, and *How to Change Your Mind*, which explore the ethical, ecological, and psychological dimensions of human relationships with the natural world. A longtime contributor to *The New York Times Magazine* and an emeritus professor of journalism at the University of California, Berkeley, Pollan has been instrumental in bridging scientific inquiry and literary reflection, inviting readers to rethink cultivation, consumption, and consciousness through a deeply ecological lens.



Carol Freeman
Viola tricolour grows again,
December 2024. When I
went to photograph them a
few weeks later, a rabbit had
neatly cropped every flower
from the top of their stems.

Performing the Ragged Garden

In 2020, a guerrilla gardening project began in the corner of an apartment block adjacent to a hotel carpark. *The Ragged Garden* is planted with 'uncultivated' shrubs and rushes that grew on the site before European colonisation, and flowers that may have grown in the forgotten garden of the Ragged School that stood there later. In the steel and concrete environment of the city, this tiny garden under the Gleditsia trees is a constantly transforming stage show where vegetal and interspecies dramas take place daily.

text and images: Carol Freeman

There was a partly hidden, left-over corner between the walls of a three-storey apartment block in a central business district, surrounded by closely crowded buildings and shaded by trees. In the unsettled days of 2020, it seemed just the place for a garden. Four years later, this tiny segment of land gestures toward two earlier gardens on that spot: the original wetland that was there before European invasion and the flower garden cared for by poor children, who attended the Ragged School that stood there in the second half of the nineteenth century. Incorporating both, the Ragged Garden is a microcosm of past landscapes, serving to enlighten people who pass by and for the benefit of the plants themselves. In a space closely surrounded by paved surfaces and buildings, it is a site of intense botanical and interspecies performances.

Aspects of this outdoor theatre are considered in terms expressed by Prudence Gibson and Catriona Sandilands in their Introduction to the “Plant Performance” issue of *Performance Philosophy*, where they emphasise that “plants perform” in their own interests as part of “a multi-species network of performativity”; that plants “perform among, and for, people”; and that plants perform biopolitical roles “in imperialism, colonialism and commodity capitalism”.¹ At the centre of the story are plants from both eras and their complex vegetal lives as they merge in this tiny corner of the city. As the garden grows, it becomes a counterpoint² to plant blindness and ideas of destruction and commodification in the ongoing processes of colonialism.

The first act

In 2020, this small space was covered in chickweed, dandelion, ribwort plantain, nettles, and sow thistle, thriving in hard soil embedded with broken concrete and covered with mounds of leaves.³ Two deciduous Gleditsias, or honey locusts, a thornless variety *G. triacanthos* ‘Sunburst’,⁴ were planted there in the 1990s when the area transformed from industrial to inner-city residential. The trees dominate the space, creating darkness in the corner at the height of summer, dappled shade as the sun turns from east to north and, with their excessively pendulous branches, interfering with the boom gate and taunting the cars that populate the surrounding bitumen. In a breeze, their trailing branches part like stage curtains to reveal daily events in the garden.

A preliminary performance took place in the Spring of 2020 when I met with the hotel management, who own the land, to discuss whether I could continue making the garden I had already begun. I turned the corner to see three men in suits: the CEO, an insurance man, and the property manager. They decided I must not erect structures that may fall on anyone and leave room for two cars, as this was an overflow parking area. As they left, I was told that the land was vacant because it was the site of the former Ragged School for poor children: a place of nurture and hope for the children of the town’s disadvantaged residents, seafarers and former convicts. Then, I discovered that the Ragged School had a forgotten garden. No details or pictorial record remain, but later inspectors’ reports mention a school garden and that there were always flowers in the classrooms.⁵

The site is only meters away from the point, initially marked with a blaze tree, that British invaders chose to build the town and in the space of several weeks completely removed all vegetation. Two creeks



Carol Freeman

The Ragged Garden under the Gleditsia trees, 2023 © Carol Freeman

that flowed into the big river, Timtumili minanya, and had created the wetland habitat were diverted and buried under the city’s streets when the Ragged School closed in 1914.⁶ The area then became a heavily built industrial zone with no trees or gardens for nearly a hundred years. Colonisers, with European ideas of relentlessly controlled and cultivated landscapes, would have perceived the swampy environment as ‘ragged’, just as they regarded the children who attended the school.⁷ So the garden acquired a name and a purpose: to revive fragments of past vegetal lives that would acknowledge Indigenous land and connection to Country, as well as recognise the comfort that a European flower garden provided for displaced children.

The earliest garden

For the Muwinina people of the South East nation, the wetland was a rich source of food, fibre, and medicine for which they hold a close affiliation and strong sense of custodial responsibilities, as with all elements



Carol Freeman

Domain grassland with pre-colonial manna gums *Eucalyptus viminalis* and re-established kangaroo grass *Themeda triandra* near the Ragged Garden, 2024 © Carol Freeman

of Country. On the side of the garden leading from Ragged Lane, there now grows knobby club-rush *Ficinia nodosa*, blue flax lily *Daniella tasmanica*, and the fronds of white flag iris *Diplarrena moraea*, just as they did before they were violently removed. Flowers of knobby club-rush are hermaphroditic, transforming from female to male as they appear in a single, circular, brown and cream spikelet that clings just below the top of each stem. When the rushes have seeded, they grow a subterranean plant stem or rhizome: a creeping rootstalk that can develop axillary buds and grow horizontally, while still retaining the ability for shoots to grow upwards. This works as an anchor when the plant grows in unstable conditions and stores nutrients for when new shoots are formed, or when the plant dies back in winter. When the rhizome is separated, each piece may become a new plant and provide a source of food for themselves, for humans and more-than-human co-inhabitants.⁸ So *Ficinia nodosa* performs in their own interests, as well as those that benefit others. Bushes that were common in the wider area, such

as Round-leaf mintbush *Prostanthera rotundifolia*, and pink flowering *Indigofera australis*, are flowering abundantly in the Ragged Garden. They grow close to pale-grey, coastal saltbush (*Atriplex cinerea*), next to a male pepper berry, yellow-flowered correa, and mother shield ferns. Beneath them, clumps of knobby club-rush throw seeds into the gravel, and tiny spikey clumps now grow there for the first time in 200 years. The area is no longer a wetland, but the plants are performing with family and thriving in the stony soil.

First Nations artist Julie Gough tells us that prior to European invasion, materials to provide for the immediate needs of Indigenous people were sourced from local areas and, in doing so, specific relationships, or bonds, were formed between people and plants. Rush-like grasses such as *Ficinia*, *Daniella*, and *Diplarrena* were woven into baskets, and a close familiarity developed as women gathered and held the smooth surface of the fronds and split, bent, braided, coiled, and twined the reeds into a new form. Baskets were used to carry food gathered from wetlands and even taken underwater when diving for mussels, fern roots, and tubers.⁹ Today, these close human-plant relations have been revived through cultural workshops where participants search for fibres and become aware of unsustainable land use. It has also encouraged the planting of local grasses in home and public gardens.¹⁰ And not far from the Ragged Garden, formerly threatened kangaroo grass *Themeda triandra* is being nurtured once again to cover the hill called the Queen's Domain.¹¹

Vegetal dramas

Early in 2022, at the height of the Covid-19 pandemic, a tall stem suddenly rose in the central corner of the garden. As the purple stem-casing peeled away, delicate compound umbels unclosed and intricate webs of flower and seed unfolded. I discovered it was the legendary Angelica— a biennial plant that for thousands of years has had a deep association with healing, and named according to the story of a monk who dreamt that St Micheal the Archangel told him the herb would help victims of the bubonic plague that was decimating Europe in 1665.¹² Later, Linnaeus used this appellation in the scientific name, *Angelica archangelica*. The variant in The Ragged Garden was *A. atropurpurea* or American angelica, taken for medicinal and ceremonial purposes by the indigenous Mvskoke Creek tribes in Alabama, Oklahoma and Northwest Florida.¹³ I eventually remembered I had bought a small angelica plant at a not-for-profit shop stocked with seedlings from volunteers' gardens, forgotten until this sudden display during our plague.

While the spectacular performance of American angelica was a highly visible affair, many interspecies enactments in the garden take place unseen, at night, under the ground, or invisible to humans. Autumn wasps came to drink at the birdbath before rejoining the queen and helping to pollinate flowers; a blackbird (fly-on performer!) scratches the Gleditsia mulch and improves the quality of the soil; the beautiful science-fiction-like creatures called tardigrades, among the most resilient known animals on earth, consume, exhume, and recycle nutrients into the soil.¹⁴ These are the biological events that Stefano Mancusco describes as “mutual aid among natural communities of living beings as an instrument of coexistence and progress,” that he calls “the art of cohabitation” practised by plants.¹⁵ The life cycle of primrose *Primula vulgaris*, in the garden, also exemplifies



Ken Thiele

Ficinia nodosa (male phase), 2007. Wikipedia Commons

Manusco's comments. Although they are considered simple plants, their seeds have a fleshy structure called an *elaiosome* that is rich in lipids and protein, and so attracts ants who take the seeds to their nest to feed to their larvae. When the larvae have consumed the elaiosome, the ants move the seed to their "waste disposal area," which is rich in nutrients from excrement and dead bodies, and the seeds germinate there. This type of seed dispersal is called myrmecochory, from the Greek words for 'ant' and 'circular dance'—a brilliant interspecies performance.¹⁶



As I come around the corner of my apartment building to work in the garden, I see other traces of interaction: airy white down from the breast of an unknown bird is caught in the strawberry tree *Arbutus unedo*; the composting leaves below the columbines have been scratched into small piles by a bandicoot or rabbit. One morning, I see broken branches littering the carpark bitumen: the scats belong to possums taking a risk as they cross the nearby highway in the early hours to feast on honey locust's newly shooting leaf buds. Sometimes there are signs of people sitting in the garden: coins in the birdbath, stones moved, flowers picked and placed on the stones or decorating the logs. There are cigarette butts left in a neat pile on a piece of paper on the garden bench, with bare patches of earth in the gravel indicating someone has sat there. Or the round sandstone stepping stones tiny pieces of gravel have been scattered by footsteps since I last swept their surfaces.

In 1856, the same year the Ragged School opened, a lithograph was created from Edward Hopley's painting *A Primrose from England*, which recorded the transportation of a primrose plant from England to Melbourne, Australia, in a Wardian Case: the forerunner of a terrarium. The plant arrived, then, not unlike a caged bird or convict in chains. Notes that accompanied the painting's display at a Royal Academy exhibition state that its arrival in Melbourne created such excitement that "it was necessary to protect it by a guard". On the Portrait Detective website, where this image was found, the flower is used as a "vehicle" to explore the emigrant experience.¹⁷ However, the picture glorifies the *primrose's* performance and shows how plants are important actors in the story of their own lives, as species introduced to places with very different conditions. In the Ragged Garden today, pale primroses cluster near hellebores, shelter below tiger lilies and foxgloves, mix with indigenous violets, *Viola hederacea*, while heartsease have escaped their place in the children's garden to spread wildly over the boundaries designated by the hotel management and have taken root where the two cars are supposed to park. With their determined agency and adaptability, the natives and the European woodland flowers create new rules and make new performance spaces in the garden: they gather in groups beyond the log boundaries, while their seeds grow in gaps between brick paving and nearby walls.

The politics of the garden

Although some of the plants now in the garden were and are useful in the lives of the Muwinina people, and others may have been commodified or fetishised in colonial/capitalist communities, their presence in *this* garden is for their own sake.¹⁸ Planting and caring for them is what Giovanni Alois refers to as a form of political resistance to a system that "wants us to care about nature only as a resource or recreation".¹⁹ The aim is for plant-thinking: no poisonous sprays are used in the garden, and after 2 years, the soil is enriched by the tiny, abundant leaves of the Gleditsia trees and only occasional seaweed fertiliser. Plants are only cut back to remove dead foliage and encourage new growth, and selectivity is practised as "an element in our *engagement* with plants".²⁰ Grass and a few weeds only are pulled from the gravel: I apologise, "sorry, not here please", and move them to the compost bin, where they contribute to

Carol Freeman

Wasp at birdbath
in Ragged Garden,

February 2023

© Carol Freeman





Edward Hopely

A Primrose from England, hand coloured lithograph by J. R. Dicksee, 1856. 62 x 75cm (detail).
State Library New South Wales

feeding plants in the rest of the garden. Flowers can flourish: a tangle of poppies, marigolds, and love-in-a-mist overhangs the inner path, while a wildly creeping *Helichrysum petiolare* (licorice plant) weaves its tendrils through the bars of the seat. As Marder writes: “care involves solicitude, attention to the cared-for, singling out and respecting their singularity” and it is *interactive*.²¹

In *The Nation of Plants*, Mancuso describes roots as bypassing centralised power in the body of the plant.²² In the guerrilla-gardening story of the Ragged Garden, power relations between the gardener and the owners of the land have evolved like the roots of a plant. For instance, when I first asked permission from the CEO to use the space, he said, “ask if you want anything”. I mentioned needing a birdbath and a seat. But a garden bench was not favoured by the management, as homeless people may sleep on it. I found a bench online that had an armrest in the middle, but



Carol Freeman

Tiger Lily *Lilium lancifolium* with *Helichrysum petiolare* finding support on the Ragged Garden bench, 2024
© Carol Freeman

Carol Freeman
The Ragged Garden
from Cresswells Row.



it was deemed too expensive. I found a cheaper one, but the insurance man said it must be able to bear a specific weight. I found one that does: no answer to email. Finally, spontaneously, we carried out a decorative, rusty iron bench that has been on our balcony for ten years and placed it in the garden. There was no reaction at all from hotel management, and it sits there still.

Water was a missing element in the garden: after multiple requests and excuses, the strata owners and the hotel management paid half each for a plumber to put a pipe through the wall of the closest unit and install a tap in the garden. Recently, a car owner managed to turn on the tap (it has a removable key) and drove over some plants. After hotel reception was informed, parking has all but ceased in the Ragged Garden. This and the tap are examples of how plants “call *us* into *their* webs of purpose and interest by performing in ways that are attractive to specific human desires”. In these cases, appreciation of this green space in the concrete city has grown with the garden and is now expressed as care and protection by the hotel staff, as well as the apartment owners.²³

A midnight parody

One morning in April 2024, I turned the corner to see that the garden sign had been torn from its support and lay across one of the logs. The rake was gone, and the bin that I had filled with leaves and clippings was now only half full. Stones had been removed and several plants had been torn out, including a young laburnum and two fragrant, full-grown, curry bushes that had a starring role beside the yellow columbines.

Only the plants had witnessed this midnight massacre, a parody of gardening. The man whose balcony overlooked the scene said he heard the voices of a man and woman talking loudly, but had fallen asleep and was unaware of their violent activities. Strangely, the semi-composted contents of the bin had been placed neatly along the base of a short wall that jutted into the garden, and a wide spread of heartsease, *Viola tricolour*, had been trodden on or buried underneath the compost. It was a scene of devastation: the bodies of the heartsease, with leaves faded and shrivelled, lay everywhere, and on the following days, not one was left alive. *A Modern Herbal* notes of heartsease, “The flower protects itself from rain and dew by drooping its head both at night and in wet weather, and thus the back of the flower and not its face receives the moisture”.²⁴ I hoped the heartsease had their heads bowed when they were trampled on. This was an extended family of plants that germinated in the gravel, close to their parents and grandparents, in a position facing East, where they could absorb morning sunshine. How many in this large swathe of heartsease died of fear for their relatives suffering so close to them? Recent research has suggested that some plants, when threatened, “will issue chemical alarm calls... decipherable only to their close kin”. Perhaps this kind of research on the behaviour of heartsease has not yet been done.²⁵

The garden areas of city parks and the grounds of the hotel are often a refuge for homeless, garden-less people. Did memory and longing have a role in this theatre of the absurd? What did the plants see that was hidden from me? I began to interrogate my role as gardener: did the garden need a sign, or is it the place of the plants to express *by their performances* who they are and what this space is

for *them*? And did this parody convey, once again, the limited understanding and sensitivity of humans.


A few months later, tiny heartsease plants have emerged from the gravel, almost in the same numbers as before. How worried I was, but the seeds of heartsease had already spread when their parents lay dying. Their re-emergence in the Ragged Garden embodies the resilience of plants through time. In this small space, so full of dramatic performances, they have caught the attention and appreciation of the human audience who live in surrounding residential buildings, work at the hotel and in nearby offices, are patients or visitors at the hospital around the corner, or pass on their way to work or walking their dogs. In this garden of memory on the edge of the city, the plants that once lived here in very different contexts can continue to seduce and collaborate, amaze and inspire.

Endnotes

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- [4] Honey locusts are indigenous to North America and often regarded as invasive in areas outside their range. 'Sunburst' is one of the thornless variety *inermis*. Oregon State University, Department of Horticulture "Landscape Plants," accessed December 1, 2024, <https://landscapeplants.oregonstate.edu/plants/gleditsia-triactanthos-var-inermis-sunburst>
- [5] Plants common in colonial gardens were identified from Phyl Simon's *Historic Tasmanian Gardens*, which includes lists of plants and plans of many gardens in Hobart. The school garden movement, strongly influenced by the annual Australian School Garden Conference in 1903, led to gardens being viewed as ideal for incorporating "progressive conservation," as well as ideas about connections between nature, hard work and moral improvement. See Aarti Subramaniam, "Garden-Based Learning in Basic Education: A Historical Review," *Monograph* (University of California, Summer 2002): 3.
- [6] The Wapping History Group, *'Down Wapping': Hobart's Vanished Wapping and Old Wharf Districts* (Blubber Head Press, 1988): 3-5 and Peter Freeman, *Hobart's Theatre Royal and the Hedberg: 200 Years of Change in Wapping* (University of Tasmania, 2021): 1-5
- [7] A connection between poor children and unmanageable vegetation was made explicit at the first meeting of the Hobart Town Ragged School Association when the Reverend W. Nicolson compared the area's children to "wild vines, which by being trained and cultivated . . . might be rendered useful, beautiful and profitable." "Hobart Town Ragged School Association," *Colonial Times*, October 29, 1856, 2-3.
- [8] Wikipedia, "*Ficinia nodosa*," accessed December 19, 2024, https://en.wikipedia.org/wiki/Ficinia_nodosa
- [9] Julie Gough et al., *Tayenebe: Tasmanian Aboriginal women's fibre work* (Tasmanian Museum and Art Gallery, c 2009) 3, 30, 44, 55.
- [10] The exhibition *Tayenebe* (2009) showed three centuries of different cross and intercultural interactions based on the making and collecting of Tasmanian Aboriginal fibre-work described as a "determined process of cultural retrieval". Tasmanian Museum and Art Gallery, "tayenebe: Tasmanian Aboriginal Women's Fibre Work," accessed November 26, 2024, <http://static.tmag.tas.gov.au/tayenebe/>
- [11] City of Hobart (Australia), "Restoring Threatened Native Grasslands on the Queens Domain," 9 March 2022, <https://www.hobartcity.com.au/Council/News-publications-and-announcements/Media-centre/Restoring-threatened-native-grasslands-on-the-Queens-Domain>

- [12] Z. A. Bhat, et al., "Angelica archangelica Linn. is an Angel on Earth for the Treatment of Diseases." *International Journal of Nutrition, Pharmacology, Neurological Diseases* 1 no.1 (Jan-Jun 2011): 36-50, accessed December 21, 2024. DOI: 10.4103/2231-0738.77531; Maud Grieve, *A Modern Herbal: The medicinal, culinary, cosmetic and economic properties, cultivation and folklore of herbs, grasses, fungi, shrubs and trees with their modern scientific uses* (Hafner, 1967): 386-387.
- [13] David Lewis, *Creek Indian Medicine Ways: The Enduring Power of the Mvsoke Religion* (Albuquerque NM: University of New Mexico Press, 2008), 155.
- [14] Performance artist Pedder Bjurman has created an augmented reality installation in which the microscopic tardigrade is a colossal being that hovers over a city. Peter Bjurjam, "Slow Walker," accessed November 22, 2024, <https://www.pederbjurman.com/projects/slowwalker>
- [15] Stefano Manusco, *The Nation of Plants* (Other Press, 2019) 141, 156.
- [16] Wikipedia "*Primula vulgaris*," accessed November 29, 2024, https://en.wikipedia.org/wiki/Primula_vulgaris; Wikipedia "Elaiosome," accessed November 29, 2024, <https://en.wikipedia.org/wiki/Elaiosome>
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- [17] See Gibson and Sandilands, "Introduction: Plant Performance," 10-11 for an overview of plant performance, instrumentalisation, and commodification.
- [18] Giovanni Aloï, "Vegetal Mythologies: Potted Plants and Storymaking," in *Estado Vegetal: Performance and Plant-Thinking*, ed. Giovanni Aloï (Minneapolis: University of Minnesota Press, 2023), 56.
- [19] Michael Marder, "Thoreau's Beans," in *Why Look at Plants? The Botanical Emergence in Contemporary Art*, ed. Giovanni Aloï (Leiden: Brill, 2019), 125
- [20] Marder, "Thoreau's Beans," 125.
- [21] Manusco, *The Nation of Plants*, 79-82. Manusco points out that this model provides for diffuse decision making, "where consensus and authority derive from one's own capacity to influence, rather than being conferred from above," 82.
- [22] Gibson and Sandilands, "Introduction: Plant Performance," 3.
- [23] Grieve, *A Modern Herbal*, s.v. "heartsease".
- Zoë Schlanger, *The Light Eaters: How the Unseen World of Plant Intelligence Offers a New Understanding of Life on Earth*, (Harper, 2024): 65. As Giovanni Aloï writes: "animals and plants see, hear, smell, sense and feel the world in ways we cannot yet even conceive". Giovanni Aloï, "Introduction," in *Why Look at Plants?: The Botanical Emergence in Contemporary Art*, ed. Giovanni Aloï (Leiden: Brill, 2019) 7.

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Barbora Lungová

The most beautiful parking lot garden in Kyjov,

2023, photo by Polina Davydenko

© Barbora Lungová

Gardens as gifts

Artist and gardener Barbora Lungová speaks with curator Edith Jeřábková about the growing presence of gardens in contemporary art. Lungová traces this shift from early painterly practice to her current projects, such as *The Rainbow Garden* and *The Most Beautiful Parking Lot in Kyjov*, where cultivation becomes both artwork and social action. Discussing queerness, ecofeminism, and community engagement, she frames gardening as a slow, collaborative medium that resists institutional norms while addressing climate, care, and social justice. The interview explores how gardens today function as aesthetic, ethical, and political spaces of imagination and repair.

in conversation: Barbora Lungová and Edith Jeřábková

For much of her career, Barbora Lungová has been known primarily as a painter; an artist deeply committed to the tactile immediacy of pigment and surface, to the ways in which color, gesture, and light can hold and release emotion. Her paintings have often hovered between abstraction and figuration, tracing the subtle tensions between what is seen and what is felt. Characterized by a lyrical sensitivity to tone and texture, her canvases evoke states of transition: moments when form begins to dissolve into atmosphere, when a landscape teeters on the threshold of memory or dream. For Lungová, painting has always been a form of thinking through materials, an act of patient observation and embodied reflection on nature, society, and queerness rather than representation.

In recent years, however, Lungová's practice has begun to extend beyond the confines of the studio, moving from the surface of the canvas into the living matter of the garden. This shift marks not an abandonment of painting but its transformation. The garden, for Lungová, has become a new kind of canvas—one that grows, changes, and resists completion. Where paint once captured the illusion of organic life, the garden allows her to collaborate directly with it. Soil, water, sunlight, and time have entered her vocabulary as media, reconfiguring her understanding of composition and process. The rhythms that once guided her brushstrokes now unfold through the slow choreography of germination, growth, decay, and renewal.

This turn toward the garden is part of a broader inquiry into how art might respond to ecological fragility and the need for new models of coexistence. Lungová approaches the garden as a site of experiment and encounter; a living ecology that challenges the artist's authority and invites participation from more-than-human collaborators. In this sense, her recent works are as much acts of care as they are aesthetic compositions. Seeds are selected, planted, and tended with attention to cycles of seasonality and interdependence; the work unfolds over months and years rather than hours or days. Through this process, Lungová's art becomes an ethics of attention, attuned to the subtle negotiations that take place between species, elements, and forces.

Her engagement with gardens also expands the temporal and sensory dimensions of her practice. The viewer is no longer a distant observer but a participant drawn into an environment that is itself in flux.



Barbora Lungová

The Most Beautiful Parking Lot in Kyjov, 2016

- present,
photo by

Polina Davydenko
© Barbora Lungová

The works cannot be owned, fixed, or preserved; they are contingent and impermanent, shaped by weather and decay. In this way, Lungová's gardens recall the meditative temporality of her paintings while introducing a radical openness to chance. Each project becomes a dialogue between control and surrender between the desire to shape and the willingness to let go.

By translating the painter's sensitivity for light, texture, and composition into the living register of the garden, Barbora Lungová continues to explore how art can mediate our relationship with the natural world. Her work today inhabits a fertile threshold where painting meets ecology, where the poetic and the biological intertwine, and where the act of creation becomes indistinguishable from the act of nurturing life itself.

Edith Jeřábková: As an artist, what do you think about the fact that many artists and curators alike have immersed themselves in gardens these days, some of whom have not even returned to the field? Based on your own practice, can you think of some reasons why this is the case?

Barbora Lungová: I have not done any empirical research on this tendency, so I can only extrapolate from my own experience. I am not sure whether the popularity of gardening in contemporary art has been only a recent trend. I can think of artists of past generations whose gardening was an integral part of their artistic practice – Derek Jarman, Ian Hamilton Finlay, Cedric Morris, Eduard Steichen, or the Czech writer Karel Čapek – but perhaps it is the sensitivity of the present times to gardening as a form of “soft” environmentalism that enables us to appreciate this “parallel practice,” or even withdrawal from the other media – or even art institutions in the most extreme cases. Maybe gardening is becoming “legitimate” as yet another medium, or maybe we are just witnessing another artistic turn? Or maybe it's coming back full circle – in the 18th century, landscaping was understood as another discipline within the fine arts. I have been gardening since I was a kid. But I have only started seriously thinking and practicing gardening as a form of art in the last few years, thanks to reading about other artists' projects that have involved cultivating plants. Many of those texts have been published in this very journal.

EJ: It's interesting to think about the need for yet another expanded field for the 21st century, perhaps for climate change and communal practices?

BL: In my humble opinion, I think that it might be the critical mass of texts and artistic practices that have opened this new window of what is possible in contemporary visual art. In contrast to the Land Art of the 1970s and 1980s, which dealt with open landscapes and in many instances responded to wilderness as a specific subcategory of the notion of “nature” (even in the Central European context, where “nature” could be understood just as the meadow or field close to a village or a city), gardening was perhaps seen previously as something too “domesticated,” too “tame,” too escapist or hobby-like, too conformist. I also think inspiration from the critical potential of gardening might stem from the practices of non-artists (however complicated *that* term might be) who use the activity of gardening as a means of democratic social action in the

context of the “right to space,” “the right to the city,” or “the right to grow.” The influence of academic discourses might also play a role, particularly of those who frame food sovereignty and the above-mentioned rights in terms of social justice and equity. I would also like to add that many forms of gardens in history as well as in the present function as symbols or representations of power, they were and are exclusive, and that it is only a narrow and quite specific form of gardening that has been embraced by contemporary visual artists who focus on the social and community context of gardens or plants, perhaps not so much on the formal aesthetic aspects that would be the domain of landscape architects. So, in this regard, “art as social action” and participatory art alongside post-humanist philosophy have been important factors in facilitating the imagination of contemporary formats of gardening currently embraced by the art world.

EJ: You are an artist, a researcher, and a gardener. Before we get into your specific activities, I'd like to ask if you see art and gardening as somewhat separate in your work or completely intertwined.

BL: As someone who started as a painter, I regarded my gardening and environmentalist practice as completely separate from my art for a long time. In the last few years, however, I have reached a phase in which most of my projects have integrated gardening, while some of the artworks are the gardens themselves. For instance, I regard the “Most Beautiful Parking Lot in Kyjov” as an artwork *per se*, with no additional outcomes in the form of visual material (other than photographic documentation), performance, a text or audio guide, or something similar. In this project, I embraced the absurdity of my municipality destroying a park next to my studio to make it into a parking lot, and I started remaking it into a garden of sorts, creating lush perennial borders along the curbs and rambunctious green walls covering my adjacent studio (itself rented from the municipality!). My use of this absurd and ironic approach rests on the point that this is not a garden made on the principle of good composition, because the spectators cannot really enjoy all that flowering opulence as a vista – the plants are wedged between the car mufflers and the walls surrounding the parking lot. I amuse myself by imagining this parking lot as a post-modern version of *hortus conclusus*, or a *garden room* of sorts.

In my project of *The Rainbow Garden in Kameníky, Kyjov*, the material garden I created is based on the principle of a conceptual script (“compose flower beds into themes or narratives using existing names of iris varieties as the sole composition principle”). As a garden dedicated to queerness, it reflects this mode of being, both by the flowerbed topics (for instance, there is a bed made of varieties which contain the word “gay” – as in Gay Hussar – or other oblique references to queerness, as in “Rainbow Fairy” (which is almost certainly unintentional on the breeder's side), as well as by the social dimension of the garden, where I organize annual queer picnics and where I have started inviting queer artists for residencies. However, my work with irises has also resulted in an author's book, which is a single specimen of a hand-painted and hand-bound book titled *Florigraphy: Or Intimate Discourse from Lesbian Life Through Irises and Several Gardens*. The book contains portraits of irises on the left-hand pages and snippets of dialogues with my partner Tamara Conde on the

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Reading the flower beds-Rainbow Garden

2023, photo by Barbora Trn

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opposite pages, which attempt to capture everyday joys and shared intimacy, but also frustrations stemming from the ubiquitous homophobia surrounding us.

EJ: Can you tell us how the concept of a Rainbow Garden developed? Did it evolve more from queer garden theories or art practice and curiosity? Are irises particularly queer plants?

BL: Unlike plants that change their flowers from male to female in a timespan of hours and are thus ultimately queer, irises are not queer in their character as such. What makes them culturally potentially queer is only their cultural imagery linked to the immense breadth of names determined by the existence of dozens of thousands of varieties. For some reason, iris breeders have been far more creative than breeders of other major decorative plant groups, so the names themselves can even tell stories. In fact, someone has already played with variety names in an art project in which she photographed plant labels in botanic gardens and highlighted their poetic nature/made poems. My interest in irises was at first sparked by their opulent visuality, but as I started looking through databases of iris collections and catalogs, I got hooked by the eccentricity of the variety names and embraced the idea that they could be used to uncover the stereotypical cultural tropes that hover in the air and stick even to plant names. Eventually, I gathered enough catalogs and real plants that I was able to plant the narrative poems. My interest in queer gardeners and queer plant projects came later, as the idea of the garden started to materialize.

EJ: Are the processes of gardening and art making similar? How do you create artworks and garden beds? For example, as a curator, I am always planning and organizing something and then in the garden I like to allow myself a more spontaneous approach and only plan when I enjoy doing so. It comes naturally, so that it does not feel like work to me. Or I try to work as much as possible without tools, just with my hands.

BL: When I paint, preparatory sketches are a part of my planning. So in this respect, painting is for me a process that is planned in the initial phases and slightly more spontaneous in the phases of the execution itself. In my gardening projects that I consider artworks, there is substantial theoretical and field research in the initial phases, but the execution itself (I am talking of projects that really materialize in the form of plant cultivation) is controlled only to a certain extent. Even in *The Rainbow Garden*, the conceptual part of the work – the thematic iris flower beds – is only one layer of it. The other layers are determined by other factors – I would say mostly constraints: how much I can physically do, how much time is available, what (little) financial means I have for the garden, etc. Also, both *The Rainbow Garden* and *The Most Beautiful Parking Lot* were formed gradually – the visual idea of the final result transforms as I allow myself to pause and reflect. Unlike a professional landscaper who sees, makes, and executes the ideal form of a garden in a short timespan, I expand and refine the visual layers of the garden in a much slower manner that is measured in years. On the other hand, I suppose that even in



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Rainbow-garden, 2024, reading the flower beds, photo by Babrora Trn

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my organizational work in academia, I apply a similar approach, which is definitely not very practical or even suitable. As for your question on tools – I am a geek in this respect. I love good Japanese handsaw blades; when I used to cut grass with a scythe, I collected at least five or six of them. I like Austrian Offner rakes, and my favorite and a nearly indispensable tool is a miniature weeding fork made of hand-forged iron.

EJ: It seems that your work with plants is deeply rooted in queerness, eco-feminism, and environmentalism. You initiated several participatory projects with other artists and art students and you also organize events based on academic models of ecological awareness. How do you understand the roles of communities and education within gardening?

BL: I consider gardens to be an excellent medium for connecting different social groups and for cultivating responsibility for shared space and its social and environmental aspects. In *Searching for the Faith of Šlapanice*, our team consisting of Marta Fišerová Cwiklinski, Nina Grúňová, and Lucie Králíková, we focused on the role of an amateur gardeners' association in preserving the surviving varieties of garden chrysanthemums that had been bred by a local gardener and were almost lost for good. Our exhibi-

tion and book centered both around the story of the breeder, about the cultural imagery of ornamental flowers, and about the role of love and enthusiasm of “ordinary” people who save these local varieties for future generations. (In fact, we did not manage to find the eponymous “Faith of Šlapanice” but found a few other varieties that were thought to be lost.)

In *Partisans With a Hoe*, our team, which consisted of artists and social anthropologists, mapped the practices of “spontaneous”/“unsolicited” (aka guerilla) gardening in Brno. In our audioguide and walking route, we lead the audience to very diverse tactics of the “adoption” of public space in Brno via unauthorized gardening. We were interested in peoples' motivations in these acts, and we also intervened in some places ourselves (although not through gardening but through creating artworks). Our research focused on aspects of gender, class, and age of the gardeners, on the affective and political dimensions of this kind of gardening, and on the experience, skills, and tactics of the gardeners.

In my new project, which I am going to carry out throughout this year, I focus on allotment gardens in Brno, which are threatened by the new zoning plan. In my planned happenings and collaboration with the allotment gardeners, I want to demonstrate the environmental, aesthetic, affective, integrative, and socializing importance of this powerful form of gardening with a long and rich history. Politicians and even many urban planners downplay or deny the importance of allotments in the city fabric. In my new project (called *Fairytale Allotments*), I hope to amplify research findings of social geographers about allotment gardening through art, so that a different kind of narrative enters the public sphere.

EJ: Time passes differently in the garden than it does at the computer, and of course our time passes even more differently than that of more-than-human creatures. Do you compare the difference in times, the rhythm of garden seasons, and academic time? Does this chronodiversity put you in a bind or does it suit you well?

BL: Aligning the time of executing my research projects with garden time can be very frustrating in some periods. Just like there are deadlines in projects, there are deadlines in the garden. If you don't weed an iris bed on time, the weeds can become too large and create a wetter micro-habitat, which encourages leaf spot fungus. Or the weed seeds ripen and scatter around, and then you have double the amount of work. Or if you don't manage to dig a bed while the soil is still moist, it might be practically impossible later because it is too hard, so you might not be able to plant what you have planned until the next year. So, paradoxically, meeting the garden deadlines can be just as stressful, because once you miss it, it means you might lose or spoil your previous work.

Also, *The Rainbow Garden* in Kameníky by Kyjov project is not a one-off, completed artwork. The concept behind it – the principle of the iris bed composition – is the dominant one and is more or less final, but the queer social dimension that I have tried to bring into the garden is a process: its time is slow and is counted in years, hopefully decades perhaps. It is a living assemblage that will hopefully become richer with time.

EJ: I assume you came to gardening through someone in your family, as



TATO ZAHRADA
 VYJÁDŘENÍ MĚ
 QUEERNESS
 ALE ZÁROVEŇ
 DALŠÍ DŮVOD
 PROČ
 NEJSEM
 S TEBOU
 NEUSTÁLE



A Love Poem in Four Stanzas
 (diagram of a flower bed planted with real Iris varieties)

Attractive Lady	Secretary	Crossdresser		Noble Justice	Started with a Kiss	
Sweet Seduction	Whisper Her Name	Unham My Feast		I Fall Lucky	Pretty Lady (')	
Never Been Kissed	Thinking of You	Softly Waiting		Say You Will	Bibbly Girl	
	Obsessed			Love me True	Wicked Woman	
Sneaking Han	Secret Weekend	Cafe' d'Amour	Drive me Wild			
Moonlit Waters	Liberal Bias	Lord of the Rings		Secret Partner	Decoy Bride	
Amber in Sea	Guilt of Free Sample	One Mac (Night)		Suspicion	Hot Gasps	
				Apartment Secret	Hysteria	Bold Statement
				Painted Love	^^	Full Disclosure
				Broken Promise	I Broke it	

Barbora Lungová

A sheet from author's book titled *Florigraphy: Intimate Dialogues in lesbian Lives and Several Gardens -Through Irises*. "This garden - an expression of my queerness, but also a reason why I am not with you permanently"

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is so often the case, which also reveals the intergenerational exchange at the heart of gardening – was this the case, and what was your first autonomous garden?

BL: Yes, I started planting ornamental flowers with my maternal grandmother when I was eight. But I also helped out in my grandparents' vineyard and their other gardens, although I was mostly running around rather than doing any serious work until I was around thirteen. Through my paternal grandmother, I started tending houseplants from the age of nine. In my parents' garden, it was mostly weeding during the season and digging in the fall that was on the chores list. So yes, I learnt the fundamentals from a very young age. I think I did a little bit more gardening than usual for my peers, but it is also true that I loved and learnt about plants from my grandfather even when I was in kindergarten.

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A sheet from author's book titled *Florigraphy: Intimate Dialogues in lesbian Lives and Several Gardens -Through Irises*

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Barbora Lungová studied English and film studies at Masaryk University in Brno and painting at Brno University of Technology, Faculty of Fine Arts in Brno, where she has taught art theory and English since 2007. Currently pursuing doctoral studies at the Academy of Fine Arts in Bratislava, her painting practice, shaped by film theory, critically and playfully explores patriarchy, masculinity, and queer representation. Her recent work engages with environmental themes through The Rainbow Garden in Kameníky, a long-term project merging queer ecology and biodiversity. She has exhibited at Plato Ostrava, the Slovak National Gallery, National Gallery in Prague, the Brno House of Arts, and the West Bohemian Gallery.

Edith Jeřábková is a curator of contemporary art. She emphasizes the role of intuition and non-hierarchical collaboration. She explores permacultural and artistic intersections and the interconnectedness of ethical, ecological and aesthetic relationships in artistic, soil and landscape systems and in interspecies communities. She observes these living interactions in the gallery environment as curator of PLATO Ostrava gallery and also outside galleries as a member of the WOODS - community for cultivation, theory and art and Are. Until recently an essential part of her activities was pedagogical work at Academy of Art, Architecture and Design in Prague. She lives in the forest in the Orlické Mountains in Czech Republic.



Plants in Pavement

The Radish Project: Greenhouse Lot Experimental Site, 2022

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The question of the impervious garden

Since 2018, I have worked with root vegetables to break up asphalt and test their ability to aid in water infiltration, soil restoration, and cooling in selected paved sites across the eastern United States. Working with vegetables, more known for their roles in food systems than for phytoremediation or bioretention, complicates how we ascribe garden-categories to the sites. Here, the type of garden, and even the designation as garden, becomes unclear. In this essay, the project *Plants in Pavement* serves as a case study to examine the role that assumed garden-identity has in framing the futures of categorically agnostic ecological projects.

text and images: Dan Feinberg

In the corner of a parking lot just outside Wilmington, Delaware, is a slightly sloped area, roughly 24 feet by 24 feet and spanned by painted diagonal stripes, still present but significantly faded. They signal an asphalted area that was off-limits to vehicles – even though the aerial view history from Google Maps indicates this was not always honored. This is a seemingly unremarkable parcel amongst a much larger parking lot that is actively used by staff at the Winterthur Museum, Garden & Library, and the occasional visitors to the Brown Horticultural Learning Center for activities that range from educational programming for children to fitness classes. The entire parking area forms an L that wraps around a series of former greenhouses – whose historic steel framing has recently been embraced as more of a decorative architectural feature – that are the source of the shorthand for this area: the Greenhouse Lot.

The corner also contains over 300 small holes, spaced six inches apart and drilled through the depth of the asphalt in an arrangement reminiscent of the parquet pattern found on the floor inside select rooms in the museum. Each hole is home to a daikon radish whose growth aims to directly open up seams in the impervious surface by forming fractures as the roots apply pressure to the asphalt.

Planted twice per year since spring 2021, this location is the longest continuous test site of *Plants in Pavement*, an experimental project that works with root vegetables to break up asphalt and explore their ability to aid in water infiltration, soil restoration, and cooling. Departing from mitigation efforts that remove large swathes of asphalt to create clearly defined planting beds within larger paved areas, this project assumes limited excavation capacity. From its inception, it has focused on aesthetic concerns by planting in site-specific patterns – challenging conceptions of dereliction when vegetation grows in asphalt.

As of January 2025, the project – an ongoing study working across the arts and the asphalt, plant, and soil sciences – has been installed in five locations across the eastern United States. Of all these sites, the Greenhouse Lot invites the most public engagement. While other installations, past and present, have existed in publicly viewable spaces – within a closed-down sidewalk slated for removal on a college campus or in the parking area left after an apartment building had been razed along a busy road – this location sits beside a central walking path that connects the Winterthur Visitor Center and the museum building in a context where people are encouraged to pause, look, and ask questions. Passersby include a mixture of one-time visitors and area residents who regularly walk some of the 25 miles of paths on the grounds.

The Greenhouse Lot site sits amid garden ambiguity. It rests only about 60 feet away from a vegetable garden whose intentions are vague enough that visitors readily ask about the destination for the vegetables. It is too small to be a meaningful producer for Winterthur's dining operation, but larger than a common residential setup. People often stop and ask, hesitantly, if it is *just for show*.¹ The lot is also surrounded by a 60-acre naturalistic garden – a garden that strives not to announce itself as a garden. This is all housed within 1,000 protected acres, which makes it challenging to know where the garden begins and ends; there is no signage to declare you are leaving the naturalistic garden and entering the *natural lands* portion of the property.²



Plants in Pavement

The Radish Project: Greenhouse Lot Experimental Site before first planting, 2021

© Dan Feinberg courtesy of Plants in Pavement

The experimental location at Winterthur, with its surrounding garden idiosyncrasies, has proven significant not only for learning about the potential for the growing process, but also for how people respond to the effort. For unconventional environmental interventions, we find that the associations that recur can be the difference between a project that is welcomed, ignored, or seen as a nuisance. Here, we can ask, specifically, how garden categories invoked by the public reveal the possibilities and limitations of the project for reframing our own relations to precarious ecologies and more-than-human worlds.

* * *

Prior to working on *Plants in Pavement*, I never felt particularly subversive calling a plant a vegetable. But after six years of planting root vegetables directly in asphalt and engaging with the public about the project, the *vegetable* designation began to shift from an obvious plant descriptor to something more, embodying a strange resolve through its use.

Just last May, a clickbait-headline that would be all too comfortable beside some online hoax about birds not being real was published: *There's actually no such thing as vegetables*.³ The article itself, more modest in



Plants in Pavement

The Radish Project: Greenhouse Lot Experimental Site, 2022

© Chase Markee courtesy of Plants in Pavement

scope than the title would suggest, referenced a discrepancy between how plants are understood in botany and in horticulture, and how the term *vegetable* might be better used to simply gesture toward general edibility. But the article did capture an anxiety about what these plants are supposed to *do* – a sentiment that has recurred throughout *Plants in Pavement*.

It is not that anyone explicitly questioned the use of *the word vegetable* in our asphalted contexts to refer to the plants. It was more the sense that vegetables, if involved, must be up to something else. Place upon these radishes was an assumed responsibility that we do not typically associate with the hyperaccumulating grasses, the carbon-capturing trees, the soil-stabilizing shrubs, the plants typically associated with remediation interventions. For years, after a thorough explanation about the reasons we work primarily with the radishes – their robustness, their temperature resilience, their low leaf profile that makes it easier to see the pattern, their annual lifecycle to not suggest a long-term claiming of the site – the ensuing conversation always seems to end up in the same place:

Can we eat the radishes?

Once, when preparing the site for replanting, a site caretaker removed a radish that had not fully broken down between growth cycles. An individual walking past noticed and stopped to ask if they could have it. Seeing no harm, the caretaker passed the radish along, rather than send it to a compost pile. After a brief pause, they remembered to clarify: these should not be consumed. The visitor promptly handed the radish back.

Often referred to as *the harvest* by visitors, the presumption that the radishes would be picked and eaten became so prevalent that in an indoor installation within Winterthur's Galleries, the curatorial team added informational signage after the exhibition officially opened to explicitly state the radishes were not for consumption – the only signage outside a project statement that included recommendations for engaging with interactive portions of the installation.

Why?

Because people keep asking about it.

But this is not the case of just the general public. Once, a plant geneticist who specializes in root vegetables and has consulted on the project commented that, throughout their entire career, they were so focused on the taste and aesthetic properties of root vegetables that they never seriously considered their potential for strength.⁴

Questioning the edibility of vegetables growing in asphalt is not unreasonable – but the response also indicates something deeper. The question speaks to the limitations we impose on the more-than-human world when it inhabits a different logic than we expect of it and, sometimes, prompts resistance when its presence no longer fits into our desires. For *Plants in Pavement*, you notice the aversion when witnessing the tinge of disappointment from onlookers who've just found out that



Plants in Pavement

The Radish Project:

Greenhouse

Lot Experimental Site,

2023

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Plants in Pavement

The Radish Project, Dairy Barn Road Experimental Site, 2022

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we should not eat the radishes. This can happen following the cautionary explanation describing the asphalt's petroleum binder and a dizzying array of toxic automotive fluids and particulate matter that are absorbed into it, but also after the more affirming rationale that the radishes breaking down in place may be beneficial for the nutrient-starved subsoil.

As the optimism of these asphalted areas as food providers dissipates, there is a lingering sense of it feeling wasteful, even sad, if a vegetable is grown without the intention of being eaten. Prior to clarification, flashing in one's mind is a scene of entirely abandoned parking lots full of edible radishes, and, one day, other vegetables as well. When the conversation is taking place in the presence of radishes actually growing in asphalt at a test site, it feels less like a radical vision than an assuring one.

After the specificity of the project's contexts becomes more clear – the unique circumstances of rural over-asphalting and how prevalent modes of remediation may not be desirable in all locales – people remain encouraged by radishes' ability to morph the pavement and create a new topography that enables water and nutrients to infiltrate the subsoil. Still, the socio-ecological aims for the project have a way of feeling more comfortable as a byproduct of food production, rather than as a thing in itself. Eating the radishes would tie an intermittent bow around a long-term process.

Rather than adopting some *don't call them vegetables* policy to potentially avoid this line of thinking (and despite doubts about their ontological status in mass media), it has felt important to confront how real they are to us and expand what we expect of them in the world. To do so, it has been necessary to consider what it would mean to think about these parking lots, these playgrounds, these paved paths – these sites of lost utility – as something the project has been apprehensive to explicitly identify with: *a garden*.

* * *

Generally, when going through the main entrance of a cinder block big-box supermarket, one walks directly into a brisk world in technicolor, encountering the saturated shades of greens, reds, and yellows within the produce section. Here, *Farm Fresh* evokes a family operation with the stereotype of an honest-to-goodness farmer on a 1950s-era tractor. *Garden Fresh* has us walking outside our back door, shears in hand, and snipping parsley leaves directly from the stems. *Garden*, in particular, suggests an intimacy that we know does not resemble the industrial-scale methods or labor that led to those leafy greens being on those shelves. *Fresh* urges us to play pretend, as though the actual planting beds are just behind the hum of the open-air refrigeration units and the hiss of the automated misting system. The branding exploits our desire to suspend disbelief. It also reveals how powerful the concept of *garden* is for this work.

Calling *Plants in Pavement* a *garden project* has never felt quite right. The project's origins emerged from several years of observing plants that grew out of the cracks in the pavement in an over-asphalted rural village that rests in a floodplain. Instead of submitting to the thought that plants would only grow in existing fractures, we strive to explore whether plants could successfully initiate them. To avoid associations with dereliction, we try to guide the fracturing to replicate various patterns that are



Plants in Pavement
Plants in Pavement
Experimental Site: Berea,
2023
© Dan Feinberg
courtesy of
Plants in Pavement

relevant to the locale or institution stewarding the site. So far, patterns have included the flooring and rugs inside the museum, features in historic maps from a university's collection, and weaving patterns from a college's craft studio.

Other interventions in asphalted sites establish firmer garden framing. *Depave*, a nonprofit out of Portland, Oregon, active since 2008, cuts a grid into asphalt and engages with the community to remove it. They dislodge as many of these blocks as possible with a mixture of crowbars, wheelbarrows, and teamwork. After soil infill and landscaping infrastructure, what is left is a remarkable garden tailored to a local community's needs, along with the relocation of the displaced asphalt. Other interventions may construct raised beds atop the asphalt that now frames the area as garden spaces. Those architectural two-to-three foot high planting beds, which by necessity need to be taller when on pavement, have the effect of placing sponges atop the asphalt to absorb water, rather than it running off. Both processes happen at a relatively rapid pace and are prime for a moment of community celebration. Sometimes it is the reveal of a landscape so thoroughly reformed that its previous impervious life is barely recognizable. Other times, the introduction of the first seedling plug into the soil of a recently erected raised bed can feel like its own tree-topping ceremony.

Plants in Pavement, by contrast, moves at a very different pace. After drilling out the holes, you can see hints of the pattern, but it is sparse, barely visible, and hardly feels like a garden has been brought into existence. A more recent adjustment to the process has been painting circles in various colors around the holes to experiment with cooling the area around each plant, which has the benefit of visually suggesting something is present and can help avoid some early cotyledon trampling. Still, this does not signal anything distinctly vegetal (nor vegetable) nor restorative.

Rather than establishing a defined garden within an asphalted area, the boundaries are also fuzzy – there is no perimeter in any clear sense, as the fracturing in any direction can move beyond any superficial boundary we set. And volunteer plants that emerge from fractures are not weeds to be pulled: they elicit excitement that they now have a new place to grow.

But it would be inaccurate to say we've disassociated ourselves from gardens. When much of the project dialogue insists that we should not, by default, rely on industrial methods for repairing spaces harmed by industrial systems, we often find ourselves appealing to the garden. After all, a radish is not a jackhammer or a diamond blade walk-behind saw that can do this work in just a few days. Upon learning about the type of engagement and amount of labor required of these sites – the sometimes twice-a-day watering on particularly warm days and weekly fertilizing over the course of several growth cycles – visitors' eyes have a way of widening with increased unease. First impromptu, and then deliberately, the response to concerns about the timeline and labor became some version of: *The kind of caretaking you would expect in a garden*.

The phrase reveals a different version of the imaginary power experienced in the produce section. Visions of excavators and milling machines and the concerns about efficiency and water infiltration rate give way to trowels, buckets of organic soil, and wide-brimmed sun hats. The

garden association cultivates an openness to prioritizing *care* in spaces where care is usually not expected. The spaces – that we have passed over, parked atop, and forgotten that anything ever existed below – could now ask more of us.

However, for *Plants in Pavement*, this association has proven deceptively challenging. Embedded in *the kind of caretaking you would expect in a garden* is the implication that people would have some shared sense of what *garden* signals, and this, we will find, can get murky.

* * *

In each of the six volumes that comprise *The Cultural History of Gardens* set, which covers periods from Antiquity through the Modern Age, there is a dedicated section conveniently titled *Types of Gardens*.⁶ Across all volumes, there are no fewer than sixty-three distinct garden types mentioned. Some waver between feeling like a type unto itself or a subtype of another. Many are paired with a host of caveats that introduce the fraught nature of such typological effort. Without an apparent requirement for consistency between volumes, each scholar was given the latitude to wrestle with how they would address this challenge of garden typology specific to their given era of expertise. One volume invokes Quatremère de Quincy's "all is more or less vague when it comes to the type," and another prefaced the chapter with how the "inflexibility of our terminology" limits differentiating cultural garden traditions, particularly outside the "West".^{7,8} Counting across the volumes, which started as an innocent task to satisfy a curiosity, became its own exercise in this discomfort. What seemed, to me, like similar antecedents and common-sense groupings began to feel more arbitrary when taking into account social systems during a particular era or different proximities to a built structure. It initially seemed reasonable to cluster the *hortus medicus* of the Renaissance with the physic garden of the Age of Empire under one umbrella, but soon a worry crept in that this wasn't nuanced enough. For *Plants in Pavement*, many garden types have been cited in conversation. An incomplete list includes the more humble set of vegetable garden, rain garden, bioswale, gravel garden, pollinator garden, guerrilla garden, but also royal gardens, botanic gardens, and other formal gardens – because that is where many will be most familiar with experiencing plants in patterns. The idea that the same experience can bring to mind both seed-bombing and the grounds at Kew speaks to the challenges for categorically agnostic ecological projects to settle into something that will be welcomed, or at least accepted, into a community – especially when that is a priority for a particular intervention.

Kendall Walton, in *Categories of Art*, speaks to the stakes when aesthetic properties do not so easily fit into understood categories.⁹ When discussing features of artworks that "have a tendency to disqualify a work from a category in which we nevertheless perceive it" it follows that "we are likely to find such features shocking, or disconcerting, or startling, or upsetting". If we have a difficult time understanding an ecological intervention's typology, it can potentially detract from the work that it is trying to accomplish – or deter implementation.

To see how phenomenological expectations of garden types im-

Plants in Pavement

The Radish Project: Greenhouse Lot Experimental Site, 2023

© Chase Markee courtesy of Plants in Pavement



pact decisions we make around them, we need to look no further than the real estate agent advice columns. Here, an in-ground garden that is well kept can be attractive to potential buyers, but the preferred is the raised bed variety because of the perception that it is easily removable. Those same potential buyers may both like the idea of committing to a property that has a garden, but be unsure if they want to devote themselves to maintaining one. Even if a raised bed and an in-ground garden are both of the vegetable variety and cover the same area, the market concludes one is better for resale because it *suggests* less permanence. That a garden being elevated 12 inches above versus embedded within the ground could be the difference between someone taking on 30-years of debt is not trivial.

These garden distinctions carry long-term consequences, and the stakes of the choices people make in relation to them are not limited to residential real estate transactions. If a prevailing association with *Plants in Pavement* is seed bombing, it increases the chances that its aesthetics would be associated with blight due to the nature of seed bombing itself. Some may find that aesthetic attractively transgressive, but many will likely find it alienating.

Just as the raised bed signals a lack of permanence, a closer examination of the home vegetable garden has its own socio-political effects beyond increased food security and community resilience, its most commonly studied aspects. Though it is generally understudied, some surveys show that the upkeep of a vegetable garden does not necessarily lead to broader ecosystem concern.¹¹ It might make someone feel more connected to “nature” when working the soil, but this *connection* reveals how much certain gardening practices can promote individualism, where the use of organic fertilizers and soils can be more about human health of the eventual consumer, rather than habitat health downstream. The garden may still bring about a “quiet sustainability” and place us within close proximity to plants, but that does not mean it entails a being-with plants.¹²

Here, the presence of vegetables, as we often understand them, could invoke a sense of exclusivity, which is antithetical to *Plants in Pavement*. Rather than feeling a sense of shared ecological kinship, the vegetables can signal the opposite because of where we often encounter them: on private property. Even in American community garden settings, the common formation is with members having their own plots. While counterexamples exist cross-culturally, there are comparatively few instances where vegetables are understood as being a part of the commons. The blurriness between private vegetable spaces and the public through gleaning laws is, today, not as blurry as once portrayed by Agnes Varda in *The Gleaners and I*. In the United States, gleaning typically involves a nonprofit intermediary, rather than allowing those who need the harvest to enter the fields themselves. Although in practice, this is beneficial for safety and equity in food access, it still upholds a structural division between the public/private by limiting access to vegetable space. It should be no surprise, then, that something that is understood as being so individualized for anthropocentric use would not be extended to broader ecosystem concerns.

How does the complexity of vegetable relations change perceptions of where *Plants in Pavement* should live and who should be re-

sponsible for their care? Asphalted areas that hold the potential futures of this project are typically private, but still carry a curious form of public presence. Beyond their established utility, they are spaces of memories: traveling carnivals and funnel cake, socializing with friends on a Friday night, parking gridlock during Black Friday shopping, or the satisfaction of seamlessly nesting a shopping cart with the previous one in the corral. While these may technically be someone else’s asphalt spaces, they have a way of feeling like all of ours.

* * *

Back at the Greenhouse Lot, the act of pouring water over the expanse of asphalt from a watering can feels a bit like performance art – the quality of an act intended for some audience rather than one meant to be solitary. But, when one watches puddles of water settle atop the hot asphalt – easily over 100 degrees Fahrenheit on a sunny 70-degree day – it becomes oddly entrancing to see the speed of evaporation. The exposed feeling of performativity retreats as the liquid’s amorphous edges rapidly converge until there is nothing left. You get the sense that you just witnessed something in real time that was only supposed to exist in stop-motion.

On some days, especially early on in a growth cycle, you distribute water across the entire site, turn around, and find little evidence that the area was recently wet. You have a fleeting doubt that you watered it in the first place, no matter how many times you’ve done this before.

One of the characteristics of these impervious sites of growth – all their social relations and embrace of vegetables – is that the emergence of plants from the small holes has a constant way of feeling improbable, even after watching them for years. Although an individual radish’s future is unclear, they continue to open up a space of wonder for those caring for each site and those who come by to visit. With each planting, each true leaf, each additional crack formed, there is a sense that we are supporting them, cheering them on, and that we are a part of a shared goal. As the radishes continue to fracture these spaces, as water permeates through, and as other volunteers sprout, we can continue to wrestle with how to relate to their existence in the wake of our many garden worlds. We can also hope that a space that we understood, so plainly, as impervious becomes an increasingly less appropriate categorization as well.

I would like to thank Erica Blair for her feedback on previous drafts of this piece and acknowledge the work and various conversations that took place with the more than 100 people who have contributed to *Plants in Pavement* in all its different seasons and locations.

Endnotes

[1] While the vegetable garden functions as an aesthetic feature of the area, its growth is also made available to the over 300 full- and part-time workers throughout growth cycles.

[2] Natural Lands is a phrase commonly used at Winterthur to describe the area outside the garden boundary.

[3] Taylor Nicioli, “There’s Actually No Such Thing as Vegetables. but Here’s Why You Should Eat Them Anyway.” CNN, May 5, 2024. <https://www.cnn.com/2024/05/05/health/what-are-vegetables-nutrients-plants-wellness/index.html>.

[4] The only people who expressed less surprise, if not a rare confidence in the process, were farmers who work with tillage radishes as cover crops – where they are not associ-

ated with being consumable.

[5] Michael Leslie and John Dixon Hunt, *A Cultural History of Gardens*, 6 vols, (London: Bloomsbury, 2013).

[6] Rafaella Fabiani Giannetto “Types of Gardens,” in *Cultural History of Gardens in the Renaissance*, ed. Elizabeth Hyde (Bloomsbury Academic, 2013), 43.

[7] Schryver uses “the shorthand of ‘West’ meaning the heartland of Western medieval Christendom in the ‘northwest European peninsula,’ and ‘East’ meaning the ‘other’ gardens of Islamic cultures from Spain in the west to the Arabian peninsula.” James G. Schryver, “Types of Gardens,” in *Cultural History of Gardens in the Medieval Age*, ed. Michael Leslie (Bloomsbury Academic, 2013), 41.

[8] Kendall L. Walton, “Categories of Art.” *The Philosophical Review* 79, no. 3 (1970): 334–67. <https://doi.org/10.2307/2183933>.

[9] Jana Šiftová, “Shaping the urban home garden: Socio-ecological forces in the management of private green spaces.” *Land Use Policy*, Vol. 111, (2021), <https://doi.org/10.1016/j.landusepol.2021.105784>.

[10] Petr Jehlička and Joe Smith, “Quiet sustainability: Fertile lessons from Europe’s productive gardeners.” *Journal of Rural Studies*, Vol. 32, (2013): 148-157, <https://doi.org/10.1016/j.jrurstud.2013.05.002>.

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T’uy’t’tanat Cease Wyss’s native gardens

In this conversation, artist and ethnobotanist T’uy’t’tanat–Cease Wyss discusses her community-based ecological projects *New Growth* and *A Constellation of Remediation*. Rooted in Indigenous permaculture, her practice blends art, education, and land stewardship, empowering youth through hands-on engagement with native plants and cultural knowledge. Wyss reflects on forest gardens, reciprocity, and decolonial approaches to care that treat gardens as living artworks and evolving communities. Speaking with Giovanni Aloï, she articulates a vision of “living institutions” that grow from love, collaboration, and respect for the land—offering hopeful models for art’s role in healing people and places.

in conversation: T’uy’t’tanat Cease Wyss and Giovanni Aloï

For over three decades, T’uy’t’tanat–Cease Wyss has cultivated an art practice rooted in the living ecologies of land, language, and community. A Sk̓wx̓wú7mesh (Squamish), Stó:lō, Métis, and Hawaiian artist, ethnobotanist, and community activist, Wyss approaches art not as an object-based practice but as a form of restoration: a weaving together of stories, species, and people. Her projects often unfold through gardens, foraging walks, seed exchanges, and communal installations that bridge traditional Indigenous knowledge systems with contemporary ecological concerns. In her hands, the garden becomes a decolonial tool: a space for re-learning, for healing, and for rebuilding relationships severed by colonial histories of land dispossession and environmental destruction.

Wyss’s gardens are not ornamental; they are pedagogical, political, and profoundly relational. Each project begins with listening to the land, to the histories it holds, and to the communities that inhabit it. Her work insists that the garden is never neutral ground but an archive of power, memory, and survival. By foregrounding Indigenous foodways, medicinal plants, and sustainable practices, Wyss reclaims knowledge that has been systematically marginalized, transforming urban and institutional spaces into living classrooms. Whether installed on museum grounds, in schoolyards, or along city greenways, her gardens invite participants to engage in acts of reciprocal care: planting, harvesting, composting, and storytelling as interconnected gestures of decolonial resistance.

This ethos of reciprocity extends beyond the botanical. For Wyss, art is inseparable from community building. Her projects unfold through collaboration with artists, environmentalists, students, and elders forming what she describes as “ecosystems of practice.” In these spaces, the boundaries between artist, audience, and environment dissolve. Everyone involved becomes both learner and caretaker, participating in cycles of nourishment and renewal. Through this model, Wyss challenges the extractive logic of both colonialism and the art world, replacing it with one grounded in Indigenous principles of mutual responsibility and interconnection.

Wyss’s approach also reimagines what artistic authorship means in



T'uy't'ananat-Cease Wyss

T'uy't'ananat Cease Wyss is an Indigenous matriarch of the Skwxw7mesh, Sto:lo, and Hawaiian people.

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a time of ecological crisis. Her gardens are process-based and temporal, designed to change, decay, and regenerate with the seasons. They are not meant to be preserved as static works but to sustain life to feed bodies, minds, and soil. This open-ended temporality reflects a worldview in which time is cyclical rather than linear, and where knowledge is embodied, transmitted through practice rather than archived in institutions. The act of gardening thus becomes a form of decolonial futurity: a way to envision sustainable, relational modes of living that resist the exploitative hierarchies of settler modernity.

In Wyss's practice, art, ecology, and activism converge. Her work does not merely represent nature it participates in it, contributing to the restoration of ecosystems and the revitalization of Indigenous knowledge. Through her gardens, Wyss offers a vision of art as a form of collective care, where creativity is inseparable from responsibility. In tending the land, she tends also to histories of erasure and the possibility of renewal. Her practice reminds us that the future must be cultivated—not imagined from a distance, but grown from the ground up, together.

Giovanni Aloï: I'm curious about how your projects—especially *New Growth* and *A Constellation of Remediation*—connect. Do you see them as part of a broader approach in your practice, or are they more separate explorations?

T'uy't'ananat-Cease Wyss: I can definitely speak to that. Haas Chawais was a commissioned project to create a wilding space between two buildings in Vancouver's Chinatown, and I was asked to do it with Indigenous youth. I went into it with a lot of love—teaching young people about gardening, Indigenous plants, and the ecosystems they thrive in is one of my favorite things to do.

Instead of just companion planting, I teach about plant guilds or “plant kin”—plants that grow well together and those that don't. It's a more relational way to think about planting.

For me, it was crucial that Indigenous youth not only planted but also learned about and shared knowledge of these plants. The project was deeply community-engaged. We built things together—a cob oven, a bench—drawing on Indigenous design and aesthetics. So, it wasn't just gardening; it was visual art, land stewardship, and cultural education.

One of the youths I trained now stewards the garden and leads programming there. I visit a few times each year to check in—and because we've become good friends. They see this as vital work, and I'm glad to have helped create a space and program where Indigenous youth can take the lead in permaculture and restoration. The goal was always to build their skills and give them something solid for their future—not just to say, “I did some gardening,” but to demonstrate real, long-term experience in design and ecological care.

One youth, who sadly passed away last year, laid down a beautiful reflexology footpath made of stones. It became a place of healing. That garden is a living document—it keeps evolving. The pride young people and marginalized community members feel in that space is powerful. It's now stewarded in partnership with Gallery 221A, which is rare—most projects like this don't get to live on.

The only other project that even comes close, though it's quite different, is the Mike MacDonald Butterfly Garden at the Walter Phillips Gallery in Banff. He planted several gardens across the country, but few have survived over the decades. I don't know how long this one will last—development pressure is always there—but the landowner supports it and has made an agreement with the gallery to keep it going. That's huge. As for *A Constellation of Remediation*, that came later. I had just completed a three-month Indigenous Women's Decolonial Permaculture course in Seattle, which helped me prepare. Haas Chawais became a kind of testing ground for using found materials to build things like mounds.

Anne Riley came up with the idea for *Constellation* and generously invited me to collaborate. We're actually close to finishing the publication, and I'll make sure to send you a copy once it's done. The project wasn't just about remediating a former gas station site; it was also about remediating relationships—between people, the land, and Indigenous presence in the city. We wanted to challenge colonial histories embedded in urban space. Over six months, we transformed the corner of Hastings and Commercial into a flower-filled two-acre site. This was right when COVID hit—people were isolated and struggling, and the garden became a space of joy, surprise, and



T'uy't'ananat-Cease Wyss

Xaw's Shewá'y (New Growth), 2019-ongoing, installation views, Vancouver, 2019.

Photos: Damaris Riedinger, courtesy of the artist & 221A, Vancouver

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healing. It showed us that remediation is just as much about people as it is about soil and that we are still struggling with colonial blueprints that still hurt us.

GA: I'm really interested in the model you're working with. It's so difficult to break the mold and engage with a garden as an artist—it's a living artwork, after all. I loved what you said about new growth and how it's always evolving. From what I gather, this was a collaboration with a gallery, and the landowner is supportive, though the future is uncertain. That said, I really appreciate the ethical dimension here.

Maybe you've experienced this too, some institutions jump on the trend of artists designing gardens, but they treat them like gallery installations. When the exhibition ends, they dismantle the garden, which feels criminal. It totally misses the point. Gardens aren't three-month projects—they require time, care, and continuity. For those who might want to follow in your footsteps, how did *Xaw's Shewá'y (New Growth)* come about? What did the process look like?

T-CW: It took a couple of years. Jesse McKee, who was doing programming at Gallery 221A at the time, invited me to see the site and asked what I thought. There was this small house there—Ken Lum's replica of a "Vancouver Special." These houses are everywhere in the city. They're not particularly attractive, but people love them because they maximize the living space on small lots. But I said, "Let's put the forest back." That flipped the usual story—we're used to forests being cleared for houses, but here we were removing a house to replant the forest. Some people weren't too sure about it, but that's what we did. And once the forest was in, the youth loved it.

I've worked with youth for many years, so I reached out to young people I knew would be committed. I could've gone through an organization, but those routes are often full of hurdles. I had a list of youth who had already expressed interest, so I chose five and trained them. They learned so fast. Young minds absorb things differently—they see it, they do it. I'm almost 60 now, and I take my time, but they were quick and intuitive.

Anne Riley helped me gather materials. We drove around in a truck, collecting bags of yard waste from alleys—branches, leaves. We sorted through it to avoid invasives. I always warn youth about willow—it's full of rooting hormones and can take over everything. We cleaned everything thoroughly. One amazing surprise: from one of the piles we picked up, a fig tree sprouted. It must've still been alive in a branch we grabbed. Now it's thriving. We call those "volunteers"—plants that show up unexpectedly. They make the garden more exciting.

Another key thing was making sure the youth were paid a living wage. Back then, I said \$200 a day, and I adjusted that as the cost of living changes. I also told them their day starts when they leave their house. Travel can be stressful—especially for Indigenous youth who face more risks—so I wanted to ease that burden. If someone only made it for an hour one day, that was okay. They showed up, brought their family, and engaged. That matters.

I always try to remove barriers. We provide food—sometimes I cover it myself. If people are working hard, they need to be nourished. I also invited ceremonial leaders to bless the work, and we held ceremonies to honor the youth: we blanketed them, sang songs, and told them how much they matter. Uplifting people is part of the work.

Indigenous youth have so much on their shoulders—they're the future caretakers. So, we need to support them with knowledge, experience, and love. Feeding people is love. Wrapping them in a blanket and saying, "You're seen, you're cared for"—that's love. That's what holds this whole thing together.

T-CW: One thing to keep in mind is that *Xaw's Shewá'y (New Growth)* happened before COVID, so we could really be with the community and do the work freely. That changed with the *Constellation* project. Just as we got started, the pandemic hit, and we had to rethink how to engage the community safely—people couldn't be close together, but we were outside, so gardens still worked.

We asked: How do we keep caring for one another during isolation? We made sure there was food—individually wrapped catering, plenty of water—and we kept checking in with each other. Gardens are about nurturing: we nurture seeds, water them, and help them grow. That mirrors how we care for ourselves. You don't just throw all the seeds into the soil. You think about what

you're growing, when, and for whom. It's intentional, and that intentionality applies to how we nurture ourselves and each other. That's one reason I love gardens—and I imagine you do too. They bring us back to what's human, in contrast to a world focused on machinery and productivity.

Anne and I swapped out the idea of “seed bombs” for “seed nuggets”—less militaristic, especially since we were working with kids. We created stations where youth and parents could build these seed nuggets from clay, soil, water, and native seeds. It was simple but meaningful: a way for people to engage at their own pace, together or alone.

When we think about designing gardens for the community, it's not selfish to ask, “What would I want?” I'd want happy people, fun activities, good food, shade, water—just the basics. Once you provide that foundation, people's intentions and creativity can bloom. Even beginners are fascinating to watch. Today, we can look up anything online, but when I was growing up, my father—who was a master gardener—taught me everything: how to harvest, how to save seeds. My family's gardening history goes back to both the Kanaka and Salish peoples. When they came together here on the West Coast under colonial pressure, they made an orchard and a food garden.

The Hawaiians brought a different gardening knowledge—used to warm weather, soft soil—and here, they learned to work with the tough local earth. The family plot they cultivated spanned four city blocks. I've been researching my mom's life and the Kanaka migrations for a project, and what I keep seeing is how much love and care both communities put into the land. They learned from each other, used seaweed and sandy loam to build the soil, and made something beautiful.

That heritage deeply inspires me. And as I've worked on gardens, I've seen more evidence that Indigenous people have always planted forest gardens—whether deliberately or by accident. We carry seeds with us, and they end up growing wherever we live. Recent archaeological research along the west coast shows these forest gardens existed pre-contact. That history is rooted in us.

GA: For someone unfamiliar with the term, could you explain what you mean by “forest garden”?

T-CW: I might've coined it myself, honestly. I look at what I did at *Haas Chawais* and see it as a forest garden. Instead of planting typical Western vegetables, I planted what you'd find in the forest—Oregon grape, salmonberries, huckleberries. The idea is to grow food without taking it from the wild, which wildlife depends on, while also supporting pollinators and birds with food and habitat. Forest gardens have become more common on the West Coast. People are realizing, “Hey, we can grow Indigenous plants in our yards and community spaces.” And that's where guerrilla gardening comes in. People plant trees and native species in forgotten spaces—sometimes without permission—and often the city ends up supporting it. They see its value. It's grown to the point that Vancouver's park board is now helping communities create food forest gardens around the city, building pollinator corridors. That's exciting to me because it means more Indigenous plants in the ground, and fewer invasives.

GA: It's such a compelling idea. When I work with my students, we ex-

plore sustainability and ways to reimagine urban and social realities in ways that reconnect us to land and plants. Most of us are alienated from that connection—so much so, we don't even realize it. One idea I float is: what if, by law, every 10 blocks in Chicago had to include a community garden—a lot that can never be developed? It's just for the people in that area. Imagine a city like that. I don't know how to make it happen, but it's a dream. What you're doing speaks to that vision. Maybe we're not there yet systemically, but it gives me hope.

T-CW: I think there is hope. There's so much heaviness in the world—so many wars, so many barriers—and now with food tariffs rising, people are starting to say, “We have to garden.” And I'm like, yes, we should have been gardening all along! So, I ride whatever wave gets people back on the land. If a trend helps people connect, I'm all for it. Let's go. Let's garden. Let's make it happen.

People often ask me for advice and thank me for being generous, and I tell them I'm also being a bit selfish. The more you plant, the less I have to plant—it means the vision is spreading. I want forest gardens everywhere. I planted an Indigenous garden next to the building here in Stanley Park. I'll send you photos. I used shells to shape the beds and also to acknowledge what colonialism destroyed—massive shell mounds that once signified village sites. Those mounds fed the shorelines, too. The tides would pull shells into the water, encouraging clams and oysters to reproduce. The shells cleaned the water and nourished the animals.

Once the mounds were removed, the ecosystem began to die. So now I'm working—slowly—on a kind of shell heap revival. I want to host little oyster feasts at The Frame and then return the shells to the water. I tell people, “We'll bring the oysters back!” Why not? I really believe we can.

We forget this planet is mostly water. We focus so much on land, but we're not taking care of our waterways. Plants have been ripped from shorelines. In Seattle, they've restored industrial waterfronts with sea asparagus, eelgrass—native plants that purify the water and create habitat. It's called the salmon highway: young fish use it for shelter. We need to do that in Vancouver.

I'm trying to recreate what are called “middens”—shell heaps—as a way to remediate beneath the surface. I'm already working on the shore, but I want to think below the waterline, too.

I pay attention to the birds here. They drop crab legs and mussel shells all over the garden—so the forest is part of their world, too. That's reciprocity. It's not just pollinators—it's all species. We have to think about what we can give back to the land, the shore, and the animals. Of course, you have to be mindful. You can't just dump any shells into the water. You need to know your environment and use what belongs there. Everything I do is about re-Indigenizing space.

GA: That makes perfect sense. I've also been wanting to ask about the design of your gardens. There's a kind of balance to strike—between what the plants need, what the visitors need, and the meaning you embed in the layout itself. How do you navigate that?

T-CW: Yeah, I've always been fascinated by the earthworks created by Indigenous peoples—massive mounds, sculpted landscapes. That interest



Tuy't'ananat-Cease Wyss

TEIONHENKWEN *Supporters of Life*, installation view, North Site, Grande Bibliothèque / BANQ, Montréal, 2021. Photo: Jean-Michael Seminaro, courtesy of MOMENTA

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deepened when I started learning about permaculture and hugelkultur, where you reuse organic materials to build raised beds. Then I thought, how amazing would it be to see Coast Salish forms—our circles, trigons, crescent moons—shaped into the land? Our art forms nearly disappeared, but were revived in the late '80s and '90s. For decades, Pacific Northwest art was dominated by Northern styles. Most people didn't even know what Coast Salish art looked like.

So, part of my work is to reintroduce these simpler, powerful shapes—not just as designs, but embedded into the land in a way that feels natural, loving, and rooted. At *Haas Chawais*, one bed was a giant crescent moon, planted with red huckleberries. But red huckleberries can't survive without cedar—they're genetically dependent on it.

We couldn't plant a full cedar tree because if the garden were ever dismantled, it would damage the land. So instead, we layered cedar mulch, boughs, and decayed sawdust into the soil to nourish the huckleberries. They started off strong, but the summer heat was too much without shade. Some died back, but other species thrived.

That's how we work: we think about each plant's needs, how to create a microclimate, and mix the soil accordingly. I do a lot of research before planting anything. Last year, I worked with the city of New Westminster to build two massive hugelkultur mounds—each about nine feet high—in the shape of Coast Salish trigons. We used scraps from city parks, carefully removing invasive species like willow. The mounds became habitats for Indigenous plants, designed to break down slowly over decades.

The city's nursery offered plant suggestions, but I made sure we used only species native to that specific area. For example, they suggested tall Oregon grape, but that's from the interior. We used the shorter coastal variety. I want people to notice something different about the garden, to feel drawn in and start asking questions. The youth I worked with learned all of this, too, and when visitors came, they could explain the stories behind the plants and the shapes. I could see their confidence growing.

The city was fully on board with my terms—bringing in youth, paying them well. It was a bigger contract, so I paid them more. Even though we often worked just four-hour days, we moved fast. City workers joked that we made the brush piles disappear too quickly. But everyone was working hard, just with a relaxed energy. That's important. Some of these folks have jobs that are just about survival. I wanted this work to feel like a break—a healing space. A decolonized space. A place where they felt safe and surrounded by people who care.

We worked in winter, too, because with climate change, summer heat domes are becoming intense. People would see us out in the snow and rain and feel sorry for us, but we were fine—we were happy. Because we knew that by summer, everything would thrive. That's what it means to work with the seasons, with patience, and with joy.

GA: I feel the same way. There are so many definitions of gardening, and what you and I are talking about wouldn't make sense to someone rooted in the colonial idea of control—clipping, shaping, topiary. That kind of gardening never appealed to me. Even “wild gardening,” which is trendy now—it's choreographed to look unplanned, but it's often just aesthetic. No real benefit to pollinators, no community engagement. It's a performance.

What you're doing is something else entirely. And I think working in gardens the way you do also challenges the idea of what an artist is supposed to be. That idea is in serious need of decolonizing, too.

Institutions and media keep pushing a narrow definition of the successful artist—someone who creates fetishized objects destined for archives. But gardens, and the kind of work you're doing, show that art can be useful, alive, and deeply relational.

So, I want to ask: how do you see yourself as an artist? And what challenges have you faced presenting yourself that way, given how unconventional your work is?

T-CW: It's so lovely to hear that. When I got your message, I was honestly blown away—like, wow, people are actually seeing my work. It's funny, though. Sometimes people in my own community still ask, “What are you doing?” And I'm like—gardens. Everywhere. People who know me just assume I'm in a garden. They'll call and say, “Are you in a garden?” And the answer's usually “yes”.

It took me a long time to even call myself an artist. One of my best friends once asked, “Why don't you see yourself that way?” Early on, I was making video art, mostly documenting land-based practices, because I was already doing land work, even though nobody else really was. And I always wanted to be on the land: that was the work.

I tried going to art school. It didn't work out. I even applied again later—still didn't work. So I just kept doing the work. And eventually, I was awarded an honorary doctorate for my dedication to the land. That's what people recognized—not the format, but the commitment.

As artists, we need to feel good about the work we do. It is work, yes, but it's also play. I like to play in the garden. Even when I make videos, there has to be joy in it. Even if the topic is heavy, I want there to be a spark—something uplifting.

Because that's what the land does. It lifts us up. It changes people. It helps them become better versions of themselves. You can feel the healing rising up from the ground when you're there. Now everyone wants to do land-based work. It's the trend. But I see people stumbling because the key is simple: love the land. Let the land teach you. Then the work will make sense. I really believe that.

GA: I ask unconventional artists this question a lot, especially those I admire. Because the hardest thing for many aspiring artists is getting past the mental box they think they're supposed to fit in. They've been told they should aim for the MoMA retrospective—that this is the pinnacle. And they twist themselves to fit that image. But then you see artists like Cecilia Vicuña—she's, what, 94 now? She's done incredibly powerful, unconventional work for decades. Eventually, institutions turn to people like her because she stayed true to her vision.

It doesn't always happen. But it happens enough to give hope—to show that there's space to redefine what an artist can be. Still, there's a long way to go. Honestly, I don't trust institutions. I think they are part of the problem.

T-CW: We need to go back to the land. We need to be outside.



T'uy't'ananat-Cease Wyss

TEIONHENKWEN *Supporters of Life*, installation view (detail), North Site, Grande Bibliothèque / BANQ, Montréal, 2021. Photo: Jean-Michael Seminara, courtesy of MOMENTA
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GA: Exactly. The question is—how can that happen without institutions? Or how can we involve them without letting them commodify what we're doing? It's always going to be a tension. But gardens push back in all sorts of ways—they unsettle institutional comfort zones. That's why I think the next 10 years could be really interesting. And like you said earlier, given everything going on in the world, people are starting to wonder again, "What happened to the victory gardens?" We had them. Then they vanished. But maybe this time we can nurture them into permanence.

GA: They need to become living institutions.

T-CW: Exactly. Living institutions. Step out of the building, onto the land. Do your work in the forest. Build a little hut with a wood stove if you need to stay warm when it rains—but be there. Be with the land as much as you can.

T'uy't'ananat Cease Wyss (Skwxwu7mesh, Sto:lo, Hawaiian, Swiss) is an educator, interdisciplinary artist and Indigenous ethnobotanist engaged in community based teaching and sharing. Throughout Wyss's 30 year practice, Wyss's work encompasses storytelling and collaborative initiatives through their knowledge and restoration of Indigenous plants and natural spaces. Wyss has been recognized for exchanging traditional knowledge in remediating our relationship to land through digital media, site-specific engagements and weaving. Wyss has participated and exhibited at galleries, museums, festivals and public space such as Vancouver Art Gallery, Morris, Helen Belkin Art Gallery, Contemporary Art Gallery and the PuSh Festival to name a few. Their work can be found in various collections such as the National Library of Canada, Special Collections at the Walter Phillips Gallery, and the Vancouver Public Library. They have lead the transformation of Semi-Public during their Fellowship at 221a and they are the 2021 ethnobotanist resident at the Wild Bird Sanctuary. They have assisted in developing an urban Indigenous garden currently showing at the 2021 Momenta Biennale in Montreal.

Radesti garden

Jon and I started to plant in 2020, on the second day of the pandemic, unplanned, an urgent act, to an unknown and famine-predicted future. The text presents a gardening artist's perspective as a social and everyday practice of learning how to participate in a common-reciprocal process of living with plants, animals, and humans, within a garden situated inside of an already existing community in a village in Romania, the embedded ethical challenges, and changes in perspectives through intimacy with the garden vis-à-vis viewing her as a landscape.

text and images: Irina Botea Bucan

We started to plant in the garden, located in the village of Rădești, in the Argeș district of Romania, on the second day of the lockdown, as a matter of urgency for the 'forthcoming famine'. March 2020, rumors of no crops, devastated and empty fields rushed the urban population into a pasta and toilet paper frenzy; while the rural population emptied the shelves of flour, *mălai* (coarse cornflower for *mamaliga*)¹ and rice, most likely for *sarmale* (cabbage rolls filled with rice). While the frenzy was analyzed on TV and social media... the urban population was still looking for fast, pre-cooked or pre-prepared meals, versus the rural population, which was looking for the basic ingredients for bread; little did we know that soon we would all finally have plenty of time in our isolated existences. Only that ours was not actually isolated at all. Our movement was indeed restricted to a certain perimeter of the land. At some point, we were confined to the perimeter of our garden, but we were in a much better situation than the urban population, who needed to borrow a dog in order to go for a walk in the park or nearby streets. I remember our friend Kiki telling us that in their block, there was only one dog for all 10 floors, who at some point refused to be walked, so much was his presence requested.

But these restrictions of 'walking freely' came in time, and by that time, we knew the secret paths that would quickly lead us to the forest, without any possibility of the police finding out. And by that time, we were so hooked and absorbed by the garden that we didn't move, so often, past her² borders anyway.

It was our first time living in the unfinished house in Rădești. Leaving Bucharest on the day before it went into full lockdown, on a bus, we brought very few clothes, and no gardening tools for sure. We did not plan to start digging. But we found a spade, and we started with vegetables and herbs. The spinach promised so much, but withered quickly after the April snow. The dill and rucola were a success right from the beginning. If we did feed the population of Rădești with something from our garden, it was with rucola pesto, an adapted recipe from Kelly Kaczynski.

From the beginning, we planted the idea of sharing 'the crop'. We renovated the house, wanting it to be for whoever needed it, artists or not. The house and garden, situated at the intersection of three roads, in the

Irina Botea Bucan
Cosmos and tomatoes, 2024
© Irina Botea Bucan



middle of the village, brought us many different types of advice and conversation. Our neighbors stopped to tell us where to dig, plant, or “make agriculture”. We became friends with the village, instantly, through the needs of the garden. Raised beds were not so popular at that time in Rădești, and I understand why. My grandparents never had a raised bed in their luxuriant ‘feeding garden’ in Pașcani; for more than 70 years. All plants were planted at the same level, weeding constantly after the rain, not much mulching, and definitely they did not know about permaculture. Jon’s knowledge was coming from more of an English tradition, and that of an urban conservationist, while I was trying to remember gardening solutions from when I was a kid in my grandparents’ garden. Twenty plum trees, one cherry, one amazing pear tree sustained with chains and thick wooden crutches, Colorado bugs collected from the potato leaves in tin cans filled with gas, white cabbage butterflies flying around gigantic cabbage heads, overgrown strawberries in the front garden near the flowering onions, the four blue tall delphiniums from the flower garden, cucumbers, tomatoes, beet leaves for the pigs, the large flat beans that made the best *bors* (borscht), the pumpkins for the pie that needed so much water. I started to look for smells and tastes in our garden.

But the weather and the soil are different in Argeș, to that in Pașcani-Fantanele, in the region of northern Moldova. In ‘our garden’, the soil is compacted clay, invaded by strong grass called *pir*, or coach grass in English (*Elymus repens*). We are also on top of what I call an ‘acacia tree city’.

The garden and house in Rădești had been left for fifteen years after the last inhabitants died. In the three months of the initial lockdown, we learned what had been previously cultivated, what trees they had, as well as their garbage-burial habits. Tanti Marioara de la Puț told us about the tree with big red peaches. We looked for saplings and babies of the ‘disappeared peach tree’ together, but without any luck. Tanti Niculina told us about the big cherries and sour cherries, from our neighbor’s cherry trees (that they would later cut down, together with seven other fruit trees). Luckily, the ‘mother sour cherry’ sent her children to our garden, and I have no idea how they all knew how to ‘jump underneath’ the fence to find safety. I believe in their secret intelligence and understanding of danger and safety, while Jon believes that they came to us as they found a more undisturbed and unbutchered ecosystem. We now have twelve very young sour cherry trees that flower every spring, and after three years, they have yielded two bowls of the most amazing fruits. Everybody told us, until this year, that we must cut some of them to let a few of them grow bigger, but since we saw them as ‘young refugees’, we had no intention of being the ones continuing the massacre. We hope that they will grow together as a Miyawaki forest, touching their fine roots and feeding each other. We don’t mulch them, and we don’t weed. They just grow on their own, strong and tall in a perfect line, following and covering the fence, under the shade of the walnut tree. Finally, this year Tanti Niculina, Dna Cici, and Dna Didi were so impressed with them and their growth that they agreed it was good to let them be.

We had initially listened to Tanti Niculina, and planted the spinach where she would have planted it in the garden for Dnu Dinculescu, the person whom we had bought the garden and house. The long portion of land where the water pipe was buried became the onion field, under

her guidance. Once I became more confident, I planted peas and beans. Mostly strong plants! I must admit, I have never seen any other being having more strength and volition. One tiny bean dislocated a 6cm soil ‘platform’ with its head while sprouting! The clay soil in our garden dries very quickly, and needs *chisai*, riverbed sand, for the vegetables to grow. For four years now, we’ve had seedlings from Nicu Pescaru, and Ana Barbu Uzura, our friend and garden goddess from Urziceni. This year, for the first time, under my constant PhD writing gaze, our tomatoes and sunflower seedlings grew tall and thick. I took as many breaks as I could from writing to look at them and measure their growth. Some are now in the new garden, west of the walnut tree, where all of the construction garbage was previously dumped. After many days and years of cleaning the soil, we still pick up rocks and fragments of bricks after strong rains.

While I sometimes call it ‘our garden’, I am well aware that we are only one stratum within its soil timeline; lucky to be living in proximity and to be observing its constant changes. And she is not just our garden, because she is part of the village community, and grows with everybody’s help.

I try to make the garden as autonomous of our presence as possible, and of course, she is. It existed before us, and she received a huge quantity of no weed before us. I mulch the tomatoes and almost everything we plant with hay from our stubborn grass, so that the moisture is kept, and fewer competing plants can grow in between the cultivated ones, but it is never enough. There would be no garden without Tanti Niculina, Dna Didi, Dnu Nicu Pescaru, Dna Cici, Melly, Gabi, Tanti Tia, Silvia, Dna Geta the nurse, Nelu, Nicu the horse, Adi, Adi Cotoiul, and many more. We plant every year, for us and the many friends who come to visit us. Each year when I come to teach in Chicago, a community of friends sustains the garden, and keep it going. A garden is an entangled social project. Thinking with Yi Fu Tuan, it is a place that acquires meaning through durational, intimate engagement. A garden turns from a space into a place, through long-term engagement: “It is made up of experiences, most fleeting and undramatic, repeated day after day and over the span of years. It is a unique blend of sight, sounds, and smells, a unique harmony of natural and artificial rhythms, such as times of sunrise and sunset, of work and play. The feel of a place is registered in one’s muscle and bones”.³ The garden moves my muscles and bones through its urgencies. It is not so often a place of contemplation, but a place that keeps me alert because of its constant needs. But it also offers a pause - and an apparent stillness, or floating. In the middle of the garden, we tried to keep a meadow with at least one haystack on it. The haystack is a reminder, a monument⁴ of the collective work of cutting the grass that I had witnessed in the Apuseni⁵ mountains, where a whole street cut the grass with scythes, and then climbed wooden ladders onto the huge haystacks they were assembling. A portion of the garden must remain ‘unworked’, untransformed (although the grass is cut), echoing Robert Duncan’s poem that Gregg⁶ would remind us every year. We may think with Duncan and Gregg, for the meadow to be a space of permission, or a pause.

Yi Fu Tuan’s defines a place as “a pause in movement”, the pause makes it possible for a locality to become a “centre of felt value”.⁷

I don’t see the garden as an artwork in itself, but as something that I hope to live with, in a reciprocal relationship. I think of myself as an am-

Irina Botea Bucan
Pumpkin pride, 2024
© Irina Botea Bucan



ateur gardener, where the amateur is Bernard Stiegler's anti-capitalist hero. In what he calls the "politics of the amateur" he reinstitutes the amateur as the non-consumerist. Through loving the object of their attention and investing their libido in the "loved object" or activity, amateurs are "figure(s) of libidinal economy". The amateur is the one who "loves", and is transformed by the object of their love, which they consider unique, incomparable, and irreplaceable, and therefore not to be thrown away.⁸ I let myself be transformed by the garden, and for some time now, gradually, I started to see the world through 'garden glasses' (to paraphrase Robin Wall Kimmerer, who mentions that for many years she has been looking at the world through moss glasses). Closely, not interested in a bird-eye-view, or the horizon, trying to identify the urgencies and needs, and bearing in mind that a garden is a reciprocal, nurturing place.

We don't have a long-term (future) plan for the garden, just a hope that it won't suffocate in concrete or grass lawns. A garden will not stop a war in itself, but the perspective from the garden will help to nurture and rethink aggression, possession, colonialism, and armed conflict through proximity. You cannot garden from a drone. I am well aware that the garden is not without conflict or dying. I remember a moment when Jon and I were watching the ginger cat of Dna Geta follow a small mouse or our favorite lizard, while birds were trying to capture our freshly laid seeds. Stanley the dog was watching the cat, and the owl eagle seemed to have just caught something.

Instead of a conclusion, I leave a few notes from the garden that is constantly growing, and will continue to do so after the end of this page.

Notes from the garden:

20th February 2025

Fine powder coming out of the big fir tree that we found here five years ago.

This year I wanted to plant more evergreens, to surround the garden in a green fence-*plapumă*,⁹ but now with the snow, I love seeing the bones of each small tree, a blank garden. A bit of rosemary, many small plum trees, and a curtain of fine snow from the trees. -12 Celsius feels like -17 outside. I love that the weather app is talking about feeling. So little noise in the snow, both audible and visual. Everything has been perfectly erased, when covered. 13 Celsius in the house and cooking a pot of beans.

If you wait long enough, you will see the slightest movements, thin snow, fine ice, falling from the trees. Soon, a new beginning.

15th March 2025

In Bucharest, I am obsessed with the 20cm long leaves on the magnolia tree! Blue purple. Changed the tomatoes to bigger pots, trying to keep myself from over-watering, especially the pansies with their human faces, and our first sunflower seedlings!!! 10!!! If we end up with 10 sunflowers, I shall be the happiest person alive!

More plans for cauliflowers, 2x blackcurrants, 1 clematis waiting to be planted together with the pink coronet. I want us to think about making a space for seating and enjoying being enclosed in flowers and greenery! I can't wait for things to just grow! Explode! Tomorrow we are going to Radesti! I hope!

I have been granted 2 more months of writing! I hope stress will be



Irina Botea Bucan
Chili, 2024
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Irina Botea Bucan
Three Sisters and more, 2024
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diminished, but not the rhythm of writing!

17th April 2025

If I were to call myself something, I would call myself an amateur gardener. I am more of a companion to the plants in the garden, and I happen to be there for a temporary period. The garden was there before my arrival. Full of garbage, pantyhose fragments, broken ceramics, metal bits, and green and yellow plastic beer lids.

I feel engulfed in a relationship of love, or attachment and care, with every single plant in the garden. Socialisation starts with the garden.

3rd May 2025

While it appears that I am writing for the PhD, my concerns are with the garden. The urgency of the garden is constantly there. Do I choose to write about the diagrammatic, or do I plant the twenty raspberry cuttings that Cici left this morning on our doorstep?

Two blackcurrants had already waited a month to be planted, and literally can't wait two more weeks.

At least now I put labels on each plant, so they don't get lost. We gave in yesterday, and we asked Gabi, our friend, to cut the grass for us, as we were swamped again. But I followed him like a shadow, asking him to save the wild strawberries, some blueish grass, elderberry babies, wild euphoria, and mystery yellow flowers. He did not mind. He saved most of the *rostopasca* (*Chelidonium majus*) as he likes it and believes it is a very good medicinal plant. Again, we promised ourselves that we won't let any 'gas mower' into the garden again.

Yesterday it rained with hail again.

Can't believe the resistance of plants now. Tanti Niculina spotted tomato seedlings growing, which filled me with hope! Together we had planted tomato seeds directly into the ground in April. She told me not to worry as the yellow tomatoes will come back. She thought they looked good! Those I have grown from seed. I don't know what type they are, even though I collected the seeds.

Potato leaves can be spotted in the ground. They will soon be tall with purple flowers. Dark, strong leaves. I wonder if they will really grow under the walnut tree. It is almost a race between them growing, and the walnut tree leafing. Shiny, shiny, shiny, leaves that survived frost and hail.

There is still a clematis, and something else to be planted, plus two more... big orange, yellow, gigantic plants.

Next year, I will commit to composting more!

And mulching. I will mulch, and mulch! This clay soil, full of stones, looks painful for plants.

Oh, gosh, I almost forgot about the cabbage and kohlrabi. I might take out the yellow hosta. And another hosta is coming back!!!! The one from last year, from the market! Happiest!

I probably like hostas, despite their 'too exotic' looks. I am happy we have finally planted blue delphinium, like in my grandmother's garden! I know that I am reconstituting my grandmother's garden, in my head, all of the time.

11th June 2025

"Our garden" does not have a birds-eye-view perspective; it is a blanket in which you can only have an embedded, immersive experience. Distances are only horizontal; your gaze might go up, or you may just think of how the earth sees you, listens to you, and not to mention that those kohlrabies are amazing UFO plants, I expect them to start flying.

Endnotes

[1] Mămăliga is a cornflower porridge, known in Italy as Polenta, that is the most popular substitute for bread in the Romanian rural areas, especially in Moldova. I grew up eating mămăliga every day at my grandparents' house.

[2] I prefer to call the garden a "she" and not an it, to avoid any objectification. In the Romanian language, a garden is a feminine noun.

[3] Tuan, Yi-Fu. *Space and Place: The Perspective of Experience*. London, Edward Arnold, 1997. p.138

[4] After sitting in Mathew Goulish's "Monsters Class" at SAIC, I realised that monument and monster share the same root "monere" (lat. be aware of).

[5] Mountain range in Transylvania, Romania.

[6] Gregg Bordowitz, former director of the SAIC Low-Res program, would start every year with Robert Duncan's Poem: Often I Am Permitted to Return to a Meadow. <https://www.poetryfoundation.org/poems/46317/often-i-am-permitted-to-return-to-a-meadow>

[7] Tuan, Yi-Fu. P.138

[8] *Boundary 2: an international journal of literature and culture*, volume 44 number 1 February 2017. Bernard Stiegler: Amateur Philosophy, Duke University Press, Chapter 1: The Proletarianization of Sensibility, Bernard Stiegler,

[9] Plapumă, is an old-fashioned Romanian duvet, hand-made, filled with sheep's wool.

Irina Botea Bucan has developed a symbiotic artist-educator-gardener-researcher methodological framework that consistently questions dominant socio-political ideas and centralizes human and non-human agency as a vehicle for meaning. Choosing to act in diverse contexts, such as academic institutions, alternative galleries, museums, art biennials, film festivals, gardens, and generic community centres, she is currently focusing on the decentralization of cultural discourses and the possibility of sustaining creative differentiation that arguably exists outside of a dominant hegemonic system of values and critique. Since 2013, she has been collaborating with Jon Dean. Currently, she is a faculty at The School of the Art Institute of Chicago and pursuing a PhD at Goldsmiths University in London titled "Unfinishing Cultural Houses". Solo and group shows include: 55th Venice Biennale; International Film Festival Rotterdam; New Museum, New York; MUSAC (Museum of Contemporary Art of Castilia and Leon); Pompidou Centre, Paris; National Gallery Jeu de Paume, Paris; Kunsthalle, Winterthur; Reina Sofia National Museum, Madrid; Gwangju Biennale, South Korea; U -Turn Quadriennial, Copenhagen; 51st Venice Biennale; Prague Biennale; Kunstforum, Vienna; Foksal Gallery, Warsaw; Argos Center for Art and Media, Brussels; MNAC (National Museum of Contemporary Art), Bucharest; Museum of Contemporary Art, Szczecin; Center for Contemporary Art Ujazdowski Castle, Warsaw. Festivals: Artefact Festival, Leuven; Rotterdam Film Festival; Impakt Panorama, Utrecht; Polis Adriatic Europe Festival. Awards: 3Arts Visual Artist Award; Impakt Film Festival Silver Award; International Residence at Recollets, Cité des Arts, Paris.



Alexandra Daisy Ginsberg

Perceptual Field 7522Ln6GnY97DSo7hCS1Mf, Tapestry - Woven, Mixed Fibre (detail)

2025. Courtesy of the Design Museum.

Photo: Luke Hayes

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Alexandra Daisy Ginsberg: Pollinator Pathmaker

Giovanni Aloï speaks with artist Alexandra Daisy Ginsberg about *Pollinator Pathmaker*, an algorithmic, more-than-human artwork which began as an Eden Project commission in 2020. Drawing on ethology and simulated pollinator vision, Ginsberg devised an “empathetic algorithm” that optimizes plantings for pollinator diversity rather than human taste, decentering the human as insects become audience. They discuss nativism versus accessibility and the practical ethics of maintaining living artworks. Framed as nodes in ecological networks, *Pollinator Pathmaker* proposes gardens as art for others, inviting a reeducation of the gaze and radical reconsideration of ecological and cultural value beyond scarcity.

in conversation: Alexandra Daisy Ginsberg and Giovanni Aloï

Alexandra Daisy Ginsberg's artistic practice examines humanity's troubled relationship with nature. Modern humans have long worked to emancipate themselves from nature and to position it in opposition to the world they make. Ginsberg uses the lens of technology to investigate what we value and, specifically, how we see "nature," exploring why and how modern societies fetishize the new while destroying what already exists.

Often subverting tropes from the history of art and science—whether the garden, the stained-glass window, the tapestry, the diorama, the sublime landscape painting, or the aviary—Ginsberg uses art to prompt reflection on the world that has been constructed around us. While the media or aesthetics employed in her physical artworks often reference traditional forms, her creative process implicates emerging technologies, from synthetic biology to artificial intelligence, testing and advancing these tools to understand the values embedded in human acts of making.

From 2008, the artist spent over a decade working with synthetic biologists to understand humanity's desire to control—and even create—life itself. Engaging with scientists and engineers from around the world and spending time in laboratories, she became immersed in a political arena where shared futures are imagined and produced. Her artworks from this period, such as *E. chromi* (2009), *Growth Assembly* (2009), and *Designing for the Sixth Extinction* (2013–15), emerged from experiments exploring the role of art and design in the development of technoscience. Reflecting on these experiences, Ginsberg was lead author of *Synthetic Aesthetics: Investigating Synthetic Biology's Designs on Nature* (MIT Press, 2014), the result of a multi-year research project between Stanford University and the University of Edinburgh. She later completed a PhD by practice at the Royal College of Art in 2017, titled *Better: Navigating Imaginaries in Design and Synthetic Biology to Question "Better."*

Ginsberg's subsequent body of work addressed ideas of loss, extinction, colonization, and the archive, including digitally reviving a northern white rhinoceros (*The Substitute*, 2019); resurrecting the scents of flowers made extinct through colonial action (*Resurrecting the Sublime*, 2019, with Sissel Tolaas, Christina Agapakis, and Ginkgo Bioworks); *Machine Auguries* (2019–), a series of site-specific reconstructions of dawn choruses using tens of thousands of field recordings and a generative adversarial network (a form of AI); and *The Wilding of Mars* (2019). Each of these works involved extensive collaborations with scientists, historians, and other experts—an integral part of Ginsberg's process—and resulted in immersive installations spanning video, smell, sound, and light.

In 2020, the Eden Project in Cornwall invited Ginsberg to create a sculpture about the crisis facing pollinators. Instead, she decided to make an artwork for pollinators. Her response, *Pollinator Pathmaker*, is grounded in questions of agency and the artist's role in an age of ecological crisis. Three large-scale institutional commissions, a village-wide research project, and countless DIY editions later, the work has evolved into the world's largest climate-positive artwork. Planting artworks for pollinators rather than gardens for humans, *Pollinator Pathmaker* continues to expand, with new curated regional "plant palettes" being added to the online interactive tool *pollinator.art* in late 2025/early 2026. The project has grown beyond planted editions to invite humans into the pollinator experience through empathy and imagination. Working with print, video, and large-scale tapestry, the artist explores how humans might be invited into an

animal's *umwelt*, or world of experience.

Pollinator Pathmaker's outdoor living artworks are algorithmically designed and planted in grids of living flora; the pixelated weave of tapestry offers another sustainable medium through which to explore digital art. Shifting away from the dominance of screens, Ginsberg's use of textiles bridges computational abstraction and the tactile interactions of ecosystems, encouraging care and tenderness toward the shared natural world. *Four Epochs of Paradise*, a 14.5-metre double-sided tapestry, traces the seasons of a real planted edition of *Pollinator Pathmaker*, its monumental scale diminishing human viewers to the size of bees.

In 2024, the artist created her first stained-glass window for Manifesta. *Every Thing Eats Light* tested a new incorporation of technology into her practice. Installed in the defunct Three Chimneys power station in Barcelona, Spain, the 6m × 3m green-tinted window depicts a diminutive hero of the industrial revolution: *Proterocladus antiquus*, a billion-year-old seaweed the size of a grain of rice and the earliest known plant to contain chloroplasts—the cellular engines that convert sunlight into energy. As sunlight moves across the glass, the projected plants appear to "grow" along the room's floors and walls.

Ginsberg is currently working on her first outdoor public art commission in bronze. *The Length of a Moment* continues her investigation into animal *umwelt* and the visualization of nonhuman worlds. Three 2.5-metre bronzes in series capture the scent of a flower as shaped by the flight of a moth searching for its nectar—a poetic continuation of her enduring commitment to reimagining relationships between species through art and technology.

Giovanni Aloï: I'd like to talk about your work with plants and gardens and how you feel that making art for the "more-than-human world" came to be. How did you find a balance between tradition and what others might see as a post-human dimension?

Alexandra Daisy Ginsberg: *Pollinator Pathmaker*, originated from a commission for the Eden Project in April 2020. They'd invited a sculpture about the pollinator crisis to bring attention to the decline in insect numbers around the world. Feeling a bit rebellious, I thought that it would be much more interesting to make a sculpture for pollinators since it was going to be outside. Then I had to work out what that meant. I started with the question of whether insects like art and if they do, what does it look like? That took me into the world of ethology—the science of studying non-human perception—starting with the visual. If an insect sees an artwork, what do they see?

I was struck by close-up image of a red flower, photographed with a special lens to simulate a bee's experience. To the bee, the petals are blue with additional markings that we can't see. The bee can't see the color red, but it can sense ultraviolet. The same ethologist, Dr Jolyon Troscianko, also had photographed bluebells in a woodland photographed using simulated bee colour perception. The bluebells are green, the foliage is red, everything is different. That really opened a way of thinking for me about how



Alexandra Daisy Ginsberg

Pollinator Pathmaker: iFADDiPqc5HU3KiFxfjBEuG (Pollinator Vision, Early Summer), fine art pigment print, 2023

© Alexandra Daisy Ginsberg Ltd.

to invite humans into the worlds of other species, and how to think about the spaces we make for ourselves, made of living things. This led to my way of conceptualizing the artwork: if pollinators designed gardens, what would humans see?

I have made a body of work about extinction and biodiversity that explores de-centering the human. In the work *Resurrecting the Sublime*, a collaboration with Sissel Tolaas, Christina Agapakis and the biotech company Ginkgo Bioworks, we resurrected the smell of extinct flowers. In this series of works, I often draw on archetypes from art history, in this case, the natural history museum vitrine. But here I put humans inside it instead of the extinct animal. Rather than looking at nature, we're looking at other humans experiencing its disappearance. Another of my works, *The Substitute*, is about technologically reviving the northern white rhino. It's a virtual diorama; the piece ends with the rhino turning to stare at us. Suddenly, we're the subject of the artwork.

Pollinator Pathmaker continues this idea of de-centering who the viewer and consumer of the artwork are. Here, the insects are the consumers of the artwork, literally eating it, and the human is its caretaker. The idea of gardens and wilderness and these words that humans use to describe the ways that we enclose nature and create boundaries around it, reveals interesting ways of thinking about why we design gardens and who we make them for.

Traditionally a garden is an enclosed entity. For an insect, borders don't matter; a garden is simply a node in the network. This initial foray into insect perception led to questioning how to de-center myself as the creator of a garden. I decided I would make an algorithm that would do something different from how we normally make technologies. I made an algorithm that would design the planting of the artwork for me. This wasn't meant to make my life easier, like most technologies often do. Instead, my aesthetic choices wouldn't be the primary concern, and the algorithm optimizes for empathy. It makes artworks for insects' tastes, not gardens for human tastes.

Of course, it's very tempting to make a garden look nice. But if you don't get to choose where things go or how it looks, you are no longer the primary consumer. That was the first step.

GA: You've done a great job of touching on all the points I was interested in. There's something about the algorithm and empathy here that reaches beyond what it does within the idea of a garden. First, I'd like to hear from you how easy it is to craft an algorithm like that, especially with a conception of empathy supposedly crafted around the notion of the "more-than-human world."

ADG: Well, I said to the string theory physicist I work with, "I want to make an empathetic algorithm." He told me I could make any kind of algorithm I wanted, but I needed to tell him what it was meant to do! He asked me to define empathy. I realized I had to transform myself into a rational being when talking about a human emotion to come up with a computable definition of empathy. I decided that it would mean pollinator diversity—how to serve as many different species as possible. So, the top-line question of this algorithm is all about diversity. It doesn't priori-

tize any one kind of pollinator but covers bees, moths, wasps, bats, hummingbirds, butterflies and more.

The algorithm itself is an optimization program. I am not a gardener; I am the daughter of a topiarist and shiitake mushroom farmer. I've had to learn along the way, coming into this artwork as an outsider and rationalizing nature. I have a background working with synthetic biologists, so it was interesting for me to now take an engineering and rational approach to nature, trying to bring order to the disordered. I worked with horticulturists and consulted with other pollinator scientists to create a database of about 150 plants so the algorithm had enough to work with for the first region, "Atlantic Europe". We had to select plants very carefully and delve into the research for each one to understand which pollinators visited. This gets incredibly complex because a lot of this research isn't done on all horticultural plants. You get a "good for pollinators" badge, but we might only have anecdotal evidence for exactly which pollinators. We need to know if it's visited by hoverflies and bumblebees or just butterflies to maximise the diversity of a planting scheme.

The algorithm then draws from that plant palette. Once you've selected your garden location and garden conditions—for example, neutral loam soil, and sunny and sheltered—it knocks out plants that aren't relevant. The algorithm then optimizes a subset of what's left over, ensuring there's something for every group of pollinators and something flowering in every season.

I had always looked at gardens and just thought different flowers come up at different times. But I'd never really considered when they emerge or why different flowers are different colors. In part, it's because different pollinators emerge at different times of the year and they attracted to different colors of flowers, depending on their vision, and different architectures of plants. For example, some plants are generalists and cater to most pollinators because the pollen and nectar are easy to access, while others have very complex shapes that are visited only by specific pollinators. All these overlapping parameters are processed by the algorithm, and out the other end, you get a planting design.

GA: Was the algorithm also aware of different gardening styles?

ADG: No. I made this algorithm so my aesthetic preferences don't get in the way. This is why it's an artistic project and not a political statement or a "truth." It's a question about whether we can make altruistic technologies that serve others before ourselves. Everything that humans do is for our own benefit and tainted by our own choices.

I am aware of garden design history, and you can see in the patterns it's making forms like single-species drifts for example. But it's a rejection of the familiar formalistic control of garden design. What may be different here from the contemporary perennial style like a Piet Oudolf garden of meadow-like planting in drifts is that we also have individual instances of just one species within these very intricate areas of planting. That might be scientifically beneficial, and we're doing a big research study now with Exeter University and Edinburgh University. This is building on the work of two pilot studies, on the artworks at the Eden Project and LAS Edition at the Museum für Naturkunde Berlin, which showed that this kind of

Alexandra Daisy Ginsberg

Pollinator Pathmaker LAS Edition planted in the forecourt of Museum für Naturkunde Berlin in the summer of 2024. Photo: Sabine Bungert. Courtesy of LAS Art Foundation.



LAS ART FOUNDATION
See plants as pollinators do
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Pollinator Pathmaker
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Alexandra Daisy Ginsberg

Salvia nemorosa 'Amethyst' flowers planted at the *Pollinator Pathmaker* Serpentine Edition, photographed in August 2023. Photo: Royston Hunt © Alexandra Daisy Ginsberg Ltd.

planting may actually be supporting a great diversity of species.

I was influenced by design naturalists like Nigel Dunnett and Piet Oudolf, and made the specific choice was to use perennials. That's a sustainability choice too because people can invest in an artwork that will last for several years rather than having to plant annuals and bulbs each year. I want people to be able to plant and take care of their artworks and see how they change over years.

GA: The models I have seen clearly show some more kind of gridding. I found that very interesting.

ADG: You can play with sliders that invite users to choose how much of the plant database is selected from. You can have more species or fewer and have a bolder or more intricate pattern, and you get a very different look. The basis behind it is a tuning of drifts and more fine-grained areas, and then these "trapplines," which are circles that get distorted and overlay it for bees



Alexandra Daisy Ginsberg

Pollinator Pathmaker Eden Project Edition, photographed in July 2022. Photo: Royston Hunt © Alexandra Daisy Ginsberg Ltd.

and other species that memorize plant locations and and optimise travel time between them.

GA: Are you planning to develop one for the United States?

ADG: We are working on new 'Plant Palettes' for California and the Northeast U.S. now. We've been more focused on native plants for the U.S., also because there is such specificity within these subregions and the regions are so big. But yes, hopefully coming this winter and next spring. I'm in the middle of painting hundreds of plants for the palettes!

GA: I have a provocative question. Over here, the urgency of reconnecting with indigenous cultures has led many people to the rewilding approach. I understand and practice it in my own garden, but I also see its limitations. It's not as easy as eradicating what was in the garden and replacing it with native species. The plants often come



Alexandra Daisy Ginsberg

Pollinator Pathmaker LAS Edition

planted in the forecourt of Museum für

Naturkunde Berlin in the summer of 2024.

Photo: Sabine Bungert. Courtesy of LAS Art Foundation.

from nurseries that produce plants that look native but aren't the real natives. There's a paradox in this rushing to remodel our gardens without thinking about what the pollinators really need.

Many years ago, Michael Pollan called for a "cosmopolitan garden," where native and non-native plants come together for pollinators. I see an embedded provocation in your project that instead of tapping into traditional knowledge, you're going to technology. Have you had any feedback, or have people appreciated or criticized it in different ways?

ADG: When I started this, I decided that I didn't want to be "nativist." That's not to say that I don't think nativism and decolonizing the garden are important. Gardens in themselves are humans colonizing nature, and turning to indigenous knowledge is incredibly important. Our contemporary garden practices introduce invasive species and all sorts of other issues. That said, I made the choice that I didn't want to be restricted to that rule set for this project. It was more important to work with locally appropriate plants to support local pollinators. Our gardens are already filled with a mixture of things from around the world. The primary objective is to encourage participation, and if the plants become too obscure or hard to find this becomes an even greater obstacle. We're trying to pick things that are commercially available.

There is an aspect of this where we must ask, "Why is this plant bad because it's from somewhere else?" These are human ideas such as "alien species"; plants have traveled through history. The speed of travel and the invasion of ecosystems are real problems. We work with our horticultural team to carefully assess whether these plants grow well together. We try not to include plants that will go crazy, but plants do. We're not telling you what to do, local knowledge is essential; this is a framework to learn and get involved in rethinking what we plant and who we plant it for.

For the U.S., the proportion of natives we've chosen is probably higher, but our advisors, including the Native Plants Trust, were also okay for us to include non-natives. It's important to plant well-chosen species to support more pollinators and allow more people to participate. We make sure any cultivars we're selecting are also still beneficial to insects.

GA: Yes, because some cultivars don't produce pollen anymore or have double crowns.

ADG: Exactly. For example, Germany has a strong movement toward native plant gardening, while UK gardeners are a bit more open-minded. All these words are so loaded, but there's a reason why it's important to consider them. It's not that we're blindly saying everything is fine, but it's a balance and a choice. The question of accessibility is so key because gardening is already expensive. You need to have a space, money to buy plants, or time to grow from seed, and all these things are already barriers to entry.

GA: I agree. It's very interesting to think about sustainability here. I think you're tampering with so many conceptions we take for granted, from the notion of an artwork outside of a museum to the durability and fetishization of artworks. As an artist, how challenging is it to create something that technically cannot be collected? You're excluding yourself from the well-tried and tested network in the art world.

ADG: This is why you and I should write a book about this project because it touches on so many different things! I keep being interested in it because there are always so many questions about the art world, the world, and technology that I've been exploring. One of the reasons I correct myself when I call them gardens is that they're not; they're living artworks. I wanted to use the language of art and its value structures and apply them here to challenge the art world. We have an *unlimited edition* of this artwork because the algorithm is generative. When I began making this, it was during the explosion of NFTs. I am not convinced by NFTs because for me, they are just a representation of one kind of value – monetary value. I think what is valuable is the flourishing of the natural world. An unlimited edition means it's hard to collect, but the more there are, the greater the abundance. This challenges the art market idea of value in scarcity. If I have a *Pollinator Pathmaker* DIY edition at home, and my neighbor has one, both of our editions will become more valuable because the pollinators are visiting both. We are even studying how insects are flying between all the different editions. The more there are, the greater the flourishing, the greater the value. Calling it an edition and an artwork means we're looking at this rectangle or square as a canvas. It's an unnatural garden that is designed for nature.

I'm critical of the technologies we make, and I make work with them to understand why we should be critiquing them. Here we have, essentially, a canvas of flowers being placed on a landscape. It doesn't need to be in a field; it can be anywhere. It is an isolated piece, but its connection to the one next to it is what matters. It's a node in a network.

We have DIY artworks that anyone can make and plant at home or in a community space, and then we rely on the value mechanisms of the art world—museums, botanical gardens, public or private collectors, and institutions—to commission large editions of the artwork. Those we treat differently; but they are all unique, even though there can be an unlimited number. Collectors buy the edition, they buy the planting plan, and they install it. We have maintenance instructions, and it is the artwork. It can technically be replanted somewhere else, but that other place has to have the same climatic conditions.

We even had an event at the LAS Edition with a conservator who had worked with Joseph Beuys' work, and she was very interested when I told her that we have a stipulation for what percentage of the artwork can be weeds. We work with commissioners for years after the work is planted, discussing maintenance and if and what needs to be replanted, but there is a tolerance for weeds because weeds are just plants out of place.

Different institutions can take a different approach. The Serpentine Edition in Hyde Park was maintained by Royal Parks in a park-like fashion, so it was perfect and ordered. At the Eden Project, it is a little wilder. We allow things to move around, to be pollinated and seed, so we have a percentage tolerance where it remains the artwork. But if you go over that, it's no longer the artwork; it must be restored.

GA: That's really true.

ADG: How do you deal with a living artwork? By its definition, it needs to

Alexandra Daisy Ginsberg

Resurrecting the Sublime, digital reconstruction
of the lost landscape of the extinct
'Leucadendron grandiflorum (Salisb.) R. Br.', Wynberg Hill, Cape Town,
imagined some time before 1806
© Alexandra Daisy Ginsberg Ltd



be flourishing, and flourishing doesn't necessarily mean the plan you put in place at the beginning. But if it tends toward monoculture, which a garden as an unnatural thing will if you allow it to, you must work with it, not against it. Sometimes things will fail in a particular location, and then we have to replace them with something else. During COVID, I was inspired by the work I had been engaging with before in synthetic biology. I wondered how an artwork could be made using distributed manufacture, through biology. In the case of *Pollinator Pathmaker*, in theory, you can ship a 700-square-meter artwork in a box of seeds, and it could be planted and become something enormous elsewhere. The magic of DNA is encoded in these seeds, and the whole artwork is fabricated in an environment elsewhere.

GA: This is an illuminating contribution about how the artwork can be sustainable for you. I'm also enjoying the way you position the artwork within a traditional format while pushing the boundaries. I was going to ask what happens to the gardens and how institutions respond, because there's a history of institutions being unprepared to care for living artworks. Do you have a set of guidance for them?

ADG: We work with the institutions and provide a technical rider. Museums are often hard-pressed. What we're doing is public landscaping. These artworks need to be planted and then looked after, just like trees planted in cities. We chose a particular way of maintaining them that is very important to me: seed heads remain over winter so they can just be cut down in the spring. This provides habitat but also reduces maintenance. We added a grassy matrix so that wherever we have species that lose foliage quickly, they share a "pixel" with grass to reduce bare ground. All of this helps to reduce maintenance costs, but I think institutions are often surprised by the expense. You can download a DIY edition plan off the internet, but for me, it's so important that when we do it in a museum setting, it is correct. What you're doing is committing to a multi-year maintenance program of an outdoor space.

GA: Do you find that institutions are surprised or feel that it's too much of a commitment?

ADG: I think it's more the expense. Making art on a big scale is expensive, even if plants grow! With this, there's a lot of project management, and it must be treated the same way as if you were re-landscaping the outside of the museum. You're committing not only to the cost of installation but also monthly, quarterly, and annual schedules. It's different from grass or paving!

GA: It's not quite like restoring a painting; it's almost like you're enabling a dialogue between yourself, the piece, the natural agents you cannot control, and what the institution will do. It's inviting the institution not to be a dinosaur that just brings in an artwork and then returns it; it's reinventing what the institution could be doing.

ADG: The LAS Art Foundation in Berlin and the Museum für Naturkunde Berlin have been fantastic partners, showing how it can work really well. What has been incredibly successful there is that the museum has vol-

unteers in the museum who help with the maintenance. They are intimately connected with this artwork because they walk past it every day. The space was previously a bare, scrappy lawn, but now there is life as you walk into a natural history museum.

The project has also been the site of scientific study with the museum and a multi-year, vary varied public programme around it. Suddenly, there is this engagement with making and keeping this space. I think that's a great model. I think it will be very sad to see it go when it's eventually dismantled, as it will be in a couple of years for a redevelopment of the museum quarter. It's a new green space in the center of Berlin, and a lot of people (and insects) feel a connection to it. LAS has also supported 15 more living artworks around Berlin in streets, schools and kindergartens, trying to plant one in every district of the city. I helped plant one in a kindergarten in Berlin, and it made me cry. It was the purest outcome of this artwork.

GA: I think it's so important. One of the aspects of the project I very much enjoy is that it's very layered and complex, yet it's also accessible. It's very hard for artworks to accomplish this. It's such a beautiful layering that can be easily explained to children, and they can enjoy it, and it might make a difference in their lives.

ADG: I've planted one at home, and as I said, I'm not a gardener; I've been learning by doing. I would never have planted something so complex myself. I got over the first hurdle, which was "What do I plant?" Now, I just had to find the plants, pay for them, plant them, and look after them. Suddenly, I was a gardener. My job was to figure out what each plant wanted and to watch this thing grow. I feel so connected with it, and I would never have done that. For the experienced gardener, there's a different challenge: the loss of control. But what I want it to do is to make you think about what you're planting, why you're planting it, and who you're planting it for. Why am I choosing to plant all white flowers, for example? It looks beautiful, but you're only serving a subgroup of pollinators.

GA: That is important. A lot of my writing is based on the principle of re-educating the gaze. We often just make decisions by default that have broader implications. For instance, I like gardens with black foliage, but I came upon facts that said they're generally unfriendly to any kind of caterpillar or insects that feed on leaves. So I'm trying to curb my enthusiasm for plants with black leaves. I think it's about finding the balance between us and the pollinators' needs.

ADG: You can see the scale of this tapestry behind me on the wall in the studio. It's for London's Design Museum, and they're not planting the living artwork; they have existing planting. But I've created a planting plan to replace all the paving in front of the museum with a *Pollinator Pathmaker* edition, with just a little path for humans. The tapestry is a proposition of what that living artwork could be, if it were planted. It's all in simulated 'pollinator vision', and it takes us through spring, summer, autumn, winter, and back to spring. It is eight meters long. I took a similar approach for the British Library, creating a planting plan for the entire piazza with little paths for humans. I created a six-minute video artwork



Alexandra Daisy Ginsberg
Four Epochs of Paradise (Human Vision side),
Tapestry – Woven, Mixed Fibre, 2024.
Documentation hang. Photo Thierry Bal
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Pollinator Pathmaker Eden Project Edition,
photographed in July 2022. Photo: Royston Hunt
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of a fly-through of that possible garden. Dig up your piazzas for humans and replace them with *Pollinator Pathmaker* artworks!

GA: That's a fantastic idea. In terms of decolonization, that would be a much more useful and beautiful application because you can start arguing that covering our soil with tar is a form of colonization that comes from extractionism. To be able to imagine that is always the first step for something to happen.

ADG: I would love to go to the British Library if it were a meadow on my way in to read. It'd be so much nicer than that big brick piazza. I've been trying to find these different models where museums can't install the living artwork. For the Design Museum, we've instead planted an edition at a local school down the road, in St Mary Abbots churchyard. The kids made the design on pollinator.art, and two hundred children helped to plant it as part of their educational program and will continue to care for it. It's a beautiful compromise, remaking a little of the world for other species and of course, for ourselves.

Alexandra Daisy Ginsberg is a multidisciplinary artist examining our fraught relationships with nature and technology. Through subjects as diverse as artificial intelligence, conservation, she explores the human impulse to "better" the world. She experiments with simulation, representation, and the nonhuman perspective to question our ongoing societal fixation on innovation over preservation. Winner of the S+T+ARTS Grand Prize – Artistic Exploration for her experimental interspecies living artwork, *Pollinator Pathmaker*, she received her PhD from the Royal College of Art. A resident at Somerset House Studios in London, she's exhibited at MoMA New York, the Museum of Contemporary Art, Tokyo, the Centre Pompidou, and Manifesta. Recent commissions include an 8-metre tapestry for the Design Museum's international touring exhibition, 'More Than Human'.

Imagining a multi-species garden

In Australia, bush fires, Covid-19 and climate change have given rise to a gnawing sense that a shift in how we care for country is required. This includes how we garden. Gardeners have the opportunity to reimagine obligations to the natural world and implement gardening as a crucial aspect of creative coevolution with all species. Such a multi-species reimagining of gardens repudiates the effects of colonisation and globalisation. It champions tenderness as a means to transfigure our shared existence rather than dominate or commodify it. It honours Indigenous wisdom and ecological know-how.

text: Lorraine Shannon

I close my eyes and imagine a garden, conjuring a space between eye and mind. Buds unfurl in the lush greenery, and the air shimmers, full of wild blue bees and birdsong. Of course, there are vegetables and an orchard with clucking hens scratching in clover. In fact, I imagine multiple gardens; suburbs bursting with colour and produce, roadsides filled with fruit trees, front lawns usurped by glowing aubergine, capsicum, and sturdy pumpkins. A world where multi-species gardens flourish.

I've taken to indulging in these wild-eyed dreams of utopia over the past few years. They're my comfort food in frightening times. I'm afraid that, like William Blake's 'invisible worm,' climate change, Covid-19, and global turmoil could be the end of a rosy life. These fears send me seesawing from hope to despair, then back to hope, an unruly and difficult thing, like clutching a large, flapping hen; or small and slippery like the skink I rescued from the birdbath. Either way, hope is hard to hold onto. Elusive. Especially when there's little cheerful news.

To imagine and dream of gardening in ways that oppose an earth-destroying neoliberal political agenda is imperative if life on our ravaged Earth is to be on safe ground. David Graeber describes how neoliberalism has waged "a relentless campaign against the human imagination ... we are talking," he states, "about the murdering of dreams, the imposition of an apparatus of hopelessness, designed to squelch any sense of an alternative".¹

One of the trickle-down effects of this neoliberal strategy has been a decline and diminishment of gardens and flourishing backyards. Housing has been promoted as a commodity and an investment opportunity rather than a human necessity, and as a consequence, in cities such as Sydney, the property market demands that houses are accompanied by slickly designed 'rooms outside' with expensive pavers and a token plant in a pot beside the pool. Like the housing estates where homes are

crammed cheek by jowl and surrounded by concrete, these sterile, dead spaces fail to provide nourishment for any species. They offer little, if any, imaginative stimulation.

Yet despite all that opposes collective growth, there are still those who take a stance for hope and imagination, who dream of multi-species gardens. Although they have endured a diet of 'jobs and growth' they understand that if we are to have a flourishing earth, we can no longer define the objective good by profit alone. Nor can we define it solely by what is best for humans. They know in their hearts that "industrialization is not an independent force ... but the hammer with which nature is smashed for the sake of capital".² They know that as geopolitical micro-sites, gardens can be the seedbeds from which to create an interconnected, resilient earth; that gardens can be launching pads for a vibrant, multi-species world.

Although gardens have been diminished, surprisingly, they still make up the largest cumulative green space in most cities. They have "the greatest potential for increasing the extent of wildlife-friendly and native-dominated habitat, improving the quality of ecosystem services, and providing opportunities for urban dwellers to reconnect with nature".³ Just across the fence, behind the hedge, over the road is another garden, and beyond suburbia are vast acres of bushland. Animals, insects, lizards, and weed seeds blown in the wind do not recognize humanly constructed borders of hedges and fences. They do not differentiate between gardens and wilderness. "Recent work has begun to recognize the importance of considering groups of gardens" as "an interconnected network ... for supporting bird populations in Madrid, Spain and Melbourne, Australia".⁴ These private networks, as well as allotments and community gardens, are vital reservoirs of biodiversity. Their importance cannot be overestimated. In Anna Tsing's words, they participate in creating a "mosaic of open-ended assemblages of entangled ways of life",⁵ one in which a gardener can work in sympathy with natural processes.

It is these possibilities that make me hopeful for the blossoming of multi-species gardens. And not just any old hope. But a hope that entails being thoughtful about actions, not rushing, being aware of the big picture as well as the details. Rebecca Solnit echoes my hopefulness when she writes that, "the hope I'm interested in is about broad perspectives with specific possibilities, ones that invite or demand that we act".⁶ This sort of hope enables me to move beyond imagining to action. It is a green light to remain true to entangled lives even if I cannot save them. It demands a "response to our impossible position as participants in and witnesses to catastrophes beyond our comprehension".⁷

However, to witness the ravaging of the Earth raises questions of the scope of a gardener's responsibility. To feel obligated to repair the world is a dangerous idea, easily fraught with arrogance and overzealousness. Yet, to do nothing is akin to sabotage. As John Roth writes, "any ethical system that thinks it has the solution to every problem has the potential to be genocidal. Ethics must no longer be a closed system but a way of living ... in openness to the vulnerability of others".⁸

So, despite misgivings, I remain impelled to make a gesture, a fragile gift, unasked for, perhaps unwanted. All I can do is ask my garden what it wants from my presence. To attempt to create on a small scale a life that is emotionally satisfying as well as embracing reciprocal relationships with

other people, animals, birds and physical objects.

In my search for inspirations from gardens overtly concerned with ethics, Ian Hamilton Finlay's *Little Sparta* stood out. Despite the common description of a garden as a 'retreat,' Finlay designed his garden as an 'attack' by placing classical ideas of ordered beauty in proximity to those of warfare in order to create a locus of transformation or rebellion against the accepted order of things.

I have been pondering the sort of action I can take to follow in the footsteps of Finlay's challenge; how I might garden against the 'accepted order of things' and forge an ethical and aesthetic approach to gardening that recognizes my shared common fate with everything that is alive. Yet in a world that can turn a blind eye to ongoing extinctions, rampant racism, genocide and the rise of the far right, I am uneasy about the word 'attack' with its connotations of aggression or war. To attack also implies an underlying drive to conquer, to dominate and control. I'm in search of a softer, more nuanced approach. Rather than conflict and mastery, I'm looking for an affectionate, companionate sociability with the more-than-human in my garden. An approach that is also open to non-Western examples of environmental interventions; one that values Indigenous life-ways and knowledge.

Some gardeners successfully use guerrilla tactics to challenge the accepted order of things. At times, I wish I, too, could stride forth full of hope and appropriate a 'forgotten' space where I could grow beauty. Guerrilla gardeners don't wait for permission to garden; they get out there and reclaim public space for the public good, producing affordable food as a form of political protest. In a similar vein, the Food Not Lawns movement stands resolute against the tsunami of the industrial food system that seeks to engulf everything in its path. Bill Mollison, founder of the permaculture movement, claims grassroots action for self-reliance is "the world's most subversive practice". He declares, "I teach people how to grow their own food, which is shockingly subversive. Yes, it's seditious. But it's a peaceful sedition".⁹ Likewise, Sarah Corbett argues for gentle protest, which entails being "thoughtful about your actions, consider[ing] each situation and keep[ing] an eye on the details so nothing is neglected or rushed".¹⁰

I want my gardening to be subversive, a subversiveness that is not solely about growing food, or creating visual beauty, but one that also champions relationship, gentleness and intimacy. There are, of course, a multitude of ways to garden. I could yank out weeds, spray insecticide with abandon, attempt to maintain strict borders, chop and prune with a vengeance. In other words, garden solely with human objectives in mind. Be heedless and determined. Or my garden could be the place where I explore how to rhyme my purposeful 'arrangements' with new patterns based on fundamental ecological systems; a place where I seek to foster an ethics of care, recognize that a garden is a micro-site of a world that "is full of persons, only some of whom are human, and that life is always lived in relationship to others".¹¹ A garden that is "saturated with mindfulness," and respectful wonder: that is above all a place in which to be tender.

Why tenderness? And what might it mean to garden with tenderness? There is still in Western societies something of a 'taboo on tenderness'. It is frequently dismissed as sentimentality; it's 'soppy' or embarrassing. It is more comfortable to imagine girding our loins for war. To attack.

To achieve clear and obvious results. Weeds eliminated; unwanted bugs assassinated. But when I wake in the morning and watch the shadows of birds silhouetted on the blinds, hear them singing as they have always done, I know the value of my garden is not primarily its value to me. Jô Gondar writes that "fear and hatred are violent and incisive emotions. Tenderness, on the other hand, constitutes another kind of force, more fluid and porous, opening a more extensive surface of communication with the outside world".¹² Tenderness curbs ideas of control, of changing the whole world. It is about the particular, about empathic concern for vulnerability. It is about what is immediately in front of me – a sick chicken, a wilting plant, a nest blown down in a storm.

It is also a challenge. For instance, first thing this morning, I discovered a possum had devoured all the beans and a bowerbird had snacked on the broccoli. Then, as soon as my back was turned, a cursed cockatoo tore my precious daphne to shreds. There is a terrible rage that charges through me on these occasions, a ruthlessness that could stamp on slugs, hurl snails over the fence, and shriek abuse at birds. This is the bare earth of my reality. I may want my garden to be a sanctuary, but it does not guarantee me a life free from anger, sorrow, pain, or fear or loss. Not only does it arouse the full range of emotions, but as a mirror of myself, its human creator, it is not simply a record of my hopes and dreams, but also my conflicts. To embrace the challenge of becoming a tender gardener, I must unpick the notion of tenderness and find within it the means to mollify my anger, to assuage my guilt, and comfort my grief.

A friend once quoted an old Chinese proverb to me. She said, 'if you keep a green bough in your heart, a singing bird will come'. Even as I recall this conversation, a butcher bird, an occasional visitor to the garden, performs in the persimmon tree like a magic flute, a bright jazzy tune. I watch the little eastern spinebills hovering over a clump of succulents in flower, while a couple of currawongs warble in the Crab Apple. They sing of this brief moment of life in which I can love, touch and know the pull of a beautiful, ravaged world. I listen to birdsong and hear something that moves me beyond the vapid jargon of neoliberalism, something that nourishes the tender, green bough in my heart.

The etymology of the word 'tender' harks back to offering an outstretched hand. It involves reaching out, risk-taking. It does not, therefore, guarantee serenity. It is distinct from joy and from anguish. It exists in a little space of its own. The sort of space in which I find myself crouching down to rescue a stranded beetle, or carefully repositioning a spider web that is stretched across a pathway.

In her Nobel lecture, Olga Tokarczuk points out that tenderness "appears wherever we take a close and careful look at another being, at something that is not our 'self'".¹³ Careful looking is a constant theme in ideas of tenderness. Bernard Saint-Girons, for example, writing on the aesthetics of tenderness, states that "the eye is not threatened and therefore does not need to master what it sees".¹⁴ Garden designer Gilles Clément has been leading the way in an understanding that how a gardener looks at the world determines how a garden is looked after. He speaks of a new breed of gardener who "... keeps an attentive eye on the wanderings of the plants and animals that enter into the garden." This allows "everything present in the garden to play an equal role in producing a dense and richly overlap-

ping whole. The arrival of a new 'weed' in the garden might be met with interest and observation – how will this plant interact with others? Does it provide food for insects? How does it affect the overall appearance and experiential qualities of the garden? This does not imply a free-for-all chaos. If a plant proves to have overly 'invasive' propensities, it can be limited through well-timed interventions".¹⁵

Looking and listening, attention and concentration, are behaviours that foster tender attunement. David Haskell claims that to listen is "a delight, a window into life's creativity and a political and moral act".¹⁶ To listen tenderly to my garden is to morally challenge the alarms that Bernie Krause outlines in *The Great Animal Orchestra* when he writes that, "the fragile weave of natural sound is being torn apart by our seemingly boundless need to conquer the environment rather than find a way to abide in consonance with it".¹⁷

Looking and listening are at the core of tenderness. Tenderness has its own authority. It implies care-ful action, a light touch which is nevertheless significant. It has much in common with the 'slow food movement.' "Slow is a movement ... toward connection rather than fragmentation, and toward ethical mutualities rather than self-interest alone".¹⁸ Like slow cooking, tenderness is never speedy or slapdash. For Liz Grandia, writing on Slow Food and the Zapatistas, slow is closely linked with an ethics of reciprocity, empathy and solidarity alongside individual ingenuity".¹⁹ In a garden, slowness works to the rhythms of the seasons, of flowering and seeding, of nesting and hatching, of singing and sleeping.

To dedicate myself to tenderness means my aesthetic notions of tidy, trimmed hedges and weed-free flower beds are up for grabs, that the creativeness of bugs and beetles and birds may plague me, but there is always something to compensate for the army of snails in the strawberry patch. By attempting to be open to the vulnerability of others, I become less isolated, feel less hostile to the garden inhabitants who thwart my aims. In trying to practise the art of 'letting be', I begin to become aware that the myriad life forms inhabiting and cooperating within the garden have their own agenda. That "butterflies, winds, seeds, people – everything communicates".²⁰ It is an awareness that Robin Wall Kimmerer regards as 'good medicine'.

In *Braiding Sweetgrass*, she writes of land and people linked through such 'good medicine':

A braid of stories meant to heal our relationship with the world. This braid is ... an intertwining of science, spirit, and story – old stories and new ones that can be medicine for our broken relationship with earth, a pharmacopoeia of healing stories that allow us to imagine a different relationship in which people and land are good medicine for each other.²¹

Tenderness is also central to this different relationship. Clément writes that the gardener's role "is to guide and enrich in sympathy with natural process, integrating accidents like fallen trees".²² He believes a gardener's intervention in the world is a central responsibility.

Being responsible doesn't kill the joy of gardening but it does

mean recognizing entanglement and relinquishing control. The authors of *Planting in a Post-Wild World*, Thomas Rainer and Claudia West, write:

Since we will not have absolute control, planting in the future will become more playful. More whimsical. Faced with a landscape of increasing instability, planting no longer has to be so solemn. It can loosen up. Be more frivolous. The uncertainty of the future will provide an incredible gift: it will liberate planting from all those forces that try to tame it – the real estate industry, 'good taste,' designers' egos, eco-vangelism, and the horticultural industry. It frees us to take risks, to act foolishly, and to embrace failure. After all, no designed planting ever lasts. Its main purpose is not to endure but to enchant.²³

These new concepts in garden design take movement and plant agency into consideration. For example, Piet Oudolf's naturalistic planting movement has become a significant global influence. Throughout Europe, urban areas have been planted in parallel with third landscapes to provide city habitats. These small gardens on traffic islands and streetscapes include perennials that self-seed and constantly regenerate themselves. Seed heads are left over the winter to provide food for birds.

The high plant density in an Oudolf garden is a fundamental break with the past. Density approaching that found in natural plant communities is far more resilient than traditional garden planting with spaces between plants. Plant communities are chosen for their hardiness as well as their aesthetic appeal and suitability for local growing conditions. The high level of diversity and openness to dynamic change that biodiversity needs is taken into account, creating a plant community in which ecology and design converge.

Globally, Indigenous communities are also foregrounding their traditional responsibilities as guardians of the land. Stephanie Mawson describes how, "not only were Aboriginal cultures dynamic, but they were also at the cutting edge of technological innovation for many millennia".²⁴ As a result, the loss of Aboriginal land management since colonisation has had devastating consequences, including catastrophic bushfires and the loss of life, both human and more-than-human.

Nowadays, what is known as reciprocal ecology is, in fact, not a new idea but one that's been quarantined by colonialism and capitalism's need for exploitation. Reciprocal ecology is a very old idea in Indigenous science, where plants and animals are understood to be humanity's oldest teachers.

Bill Gammage suggests Indigenous Australians might refer to the present-day Australian landscape as "garden left wild" in contrast to pre-colonial land management in which "The Aborigines made and managed Australia by shaping and distributing its vegetation".²⁵ Gilles Clément echoes Indigenous wisdom when he writes of being "a guardian rather than a gardener." In what he describes as the Planetary Garden, he writes of "considering ecology as the integration of humanity – the gardener – into its smallest spaces. His guiding philosophy is based on the principle of the 'garden in motion': do the most *for*, the minimum *against*".²⁶

In working to become a custodian rather than a warrior in my garden, I have found inspiration in Associate Professor Helen Milroy's understanding of healing. As an Aboriginal child psychiatrist and Australia's first Aboriginal doctor, she writes that:

Healing is not just about recovering what has been lost or repairing what has been broken. It is about embracing our life force to create a new and vibrant fabric that keeps us grounded and connected, wraps us in warmth and love, and gives us the joy of seeing what we have created. Healing keeps us strong and gentle at the same time. It gives us balance and harmony, a place of triumph and sanctuary forevermore.²⁷

As seedbeds of creation, gardens are sites of weal and woe, lament and euphoria, but by evoking tenderness, they inspire hope and the challenge to be part of an interconnected, resilient world. The tender green bough in my gardener's heart calls out for singing birds, buzzing, chirping insects, and the rustle of wind in branches. It inspires me during the day and at night when I lie down to sleep and dream of gardens flourishing as far as my eye can see. In the soft dark of night, I too sing. I sing for the Rozellas, the bower birds, the robins, and the wrens. Sing for the skinks, the bluetongues, and the frogs. Sing for the trees and the flowers, sing into the silence of the night when the tremulous earth waits for the birds to serenade the light.

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The garden at Casa Azul

This article examines botanical symbolism in Frida Kahlo's art and its material expression in the garden of Casa Azul. It argues that Kahlo's mytho-poetic use of vegetation forms an aesthetic-political framework of resistance, intertwining body and territory in a decolonial counter-narrative. Through plants, Kahlo reimagines identity, Mexicanness, and feminism as forces of national and personal rebirth after the 1910 Revolution. Drawing on decolonial studies and feminist geopolitics, the essay interprets the Casa Azul garden as a sacred, living geography—an Aztec-inspired axis mundi where nature, space, and biography converge, affirming the agency and transformative power of wild and marginal plants.

text: Mariana Menezes

Alexandra Lande
Blue House and courtyard of (La Casa Azul), 2022.
Photograph: Shutterstock Web, 26 July 2025.
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Magdalena Carmen Frieda Kahlo Calderón, or Frida Kahlo, as she is better known, was born on July 6, 1907, in Coyoacán, Mexico, where the Frida Kahlo Museum, or Casa Azul (Blue House), is currently located. She was the daughter of the German photographer Karl Wilhelm Kahlo, who migrated to Mexico in 1890 and adopted the name Guillermo Kahlo, and Matilde Calderón y González (1874 - 1932), native to Oaxaca and of indigenous and Spanish descent.

In 1910, during Kahlo's infancy, Mexico went through a decade-long period of armed conflict and social upheaval. One of the outcomes was a fertile, collective experience to debate the country's history prior to the arrival of the Spanish. The possibility of rebirth was rooted in Neo-Aztec projects that envisioned the (re)connection with values and world views disassociated from the theoretical-symbolic frameworks that expressed the colonizer's mindset and rethought the present and the future, by enabling the past to manifest itself through the appreciation of local cultural traditions. The *Mexican Renaissance*, following the revolution, refers to a period of artistic flourishing, especially between the years of 1920 and 1950, comprising numerous artistic expressions guided by the principle of reaching the largest possible number of people, and drawing from museums the centrality of exhibition spaces and the elitist character of art. By incorporating indigenous and mestizo elements as sources of inspiration and representation, art would constitute a mirror of society, fostering the creation of a new social order, disseminating to the general population messages of national unity.

In later years, Kahlo declared that her birth date was 1910 to coincide with the Mexican Revolution, associating her birth with the resurgence of Mexico. She proceeded to translate in her oeuvre a plethora of phenomena articulating discourse, power, and agency. Kahlo's compositions reflect the country's social upheaval and encourage narratives that are simultaneously personal and collective, and although related to the Mexican context, exceed the boundaries of temporality/territory.

The beginning of Kahlo's artistic production is associated with the year 1926, during which she painted *Self-Portrait in a Velvet Dress*,¹ after a long period recovering from an accident which occurred on 17 September 1925, when she was seriously injured during a collision between a bus and an electric streetcar. Due to the prolonged convalescence, Kahlo was unable to complete her studies at the National Preparatory School, which was initiated in 1922. In 1928, Kahlo's friend, Italian photographer and activist, Tina Modotti, introduced the young artist to the Mexican muralist Diego Rivera (1886-1957). In 1929, at 22 years of age, Kahlo married Rivera. Despite a brief divorce in 1939, the couple remarried in 1940 and remained together until her death in 1954.

During her lifetime (1907-1954) Kahlo painted 55 self-portraits, among approximately 143 works of art. However, the aim of this article is to focus on an underexplored theme of the artist's oeuvre,

i.e., the mythopoeic botanical symbolisms as an aesthetic-political framework of resistance, and its materialization through the garden at Casa Azul, a living extension of the artist's creative world and one of her most significant contributions.

Kahlo's representation of plants reveals diverse themes such as identity, Mexicanness, and feminism to address the metaphorical rebirth and reconstruction of Mexico by challenging allegorical matrices based on social transformation as expressions of virility promoted by a messianic spirit that elevated human beings to heroes, portrayed mainly in the figure of men.² As well, she rethinks the roles associated with women, deconstructing the idealized paradigm of the immaculate woman/mother linked to the representation of the primordial mother, or in the roles of muses. The indigenist agenda, by assuming a universalizing discourse devoid of an evident programmatic content, allowed Frida to integrate its propositions more easily with her biography. By questioning epistemes of colonial heritage, Frida manifests a feminist geography narrative in which place and space are central factors in power relations between genders.³ The relationship of expropriation and colonial domination imposed on the woman's body is analogous to that imposed on Nature. Kahlo's works, by using botanical representation as a source of identification associated with the ideas of place (native versus exotic) and hybridization (purity versus miscegenation), address these power relations.

The body-territory relationship is conveyed in Frida Kahlo's identification with her birthplace in a performative art in paint, in which identity is linked to nature.⁴ Fruits and plants native to the Americas and frequently used in Kahlo's works reveal this double connection between territory and Nature. The multiple identities explored by the artist are transmuted and unsettled, converging botanical representation and identity.

Kahlo was inspired by Mexican folk iconography and Mexica⁵ (commonly known as Aztecs) mythology to support her notion of Mexicanness manifested through her clothing and accessories, necklaces, *rebozos* (shawls), and hair ornamentation. Garments worn by Kahlo are, for the most part, inspired by Tehuana women from the Isthmus of Tehuantepec. The Tehuanas are emblematic of being part of a matriarchal society and a symbol of resistance to Spanish rule, unlike the Chingada, the mixed-race woman, and the Malinche, the woman who collaborated with the Spanish as interpreter or lover. The Tehuana would be the representation of the indigenous woman who did not bow before the colonial domination led by the white man.⁶

Mexica mythopoeic explanations also play a central symbolic role in Kahlo's representations of botanical elements. The artist uses plant species linked to everyday observations, childhood memories and the varieties adopted by Mesoamerican peoples, for whom flowers were intrinsically linked to symbolic elucidations of the origin of

life and governed everyday cultural dynamics. The dahlia, for example, from the *Asteraceae* family, widely used for ornamenting her hair, is native to Mexico and Central America and has more than 40 varieties. It is one of Mexico's symbolic flowers and was often used in Mexica rituals, representing the sun due to its shape and size. It was equally used as food and for herbal treatment. Kahlo, however, on different occasions displaces plant species from their original contexts, in which terrestrial plants occupy spaces filled with water, or merges with her body transformed into extensions of human limbs, such as arms and legs, or metamorphoses herself completely.

Duality, opposite and complementary poles, lead to creation, allied to the concept of perennial movement in which natural elements such as the sun, moon, and stars, fulfill a role in the cycle of existence. Flowers, regardless of their shape or size, represent in the microcosm all these forces that operate in the macrocosm. Kahlo, through her poetics narrated in images, constantly expresses duality, the personal and the collective, movement and pause. The stars, animals, and flowers, often depicted on the artist's canvases, evoke heaven and earth, the non-hierarchical (and in some cases, symbiotic) relationship between human beings and nature. The interconnection with vegetation appears as a continuum, in which Kahlo's relationship with her own body, and her hybridization with botanical symbols,⁷ constitute a space of contestation and resignification.

Gardens as devised landscapes

Prior to analysing the garden at Casa Azul as a lens through which to interpret Kahlo's broader practice, some considerations will be made about gardens as mediators between nature and culture, and how these relationships are immersed in power relations and forms of symbolically and material dominance.

Gardens are appropriated spaces, established by individual and collective world views, context, resources, and purposes. The general idea of a garden corresponds to the perception of an ordered space, aesthetically determined by references to color, shapes, and textures that materialize concepts linked to a particular time/place. The garden's imagery reveals perceptions imbued with metaphysical references, manifested through criteria set in a specific context. The landscape also reveals stories, and the meanings attributed to them do not exist in isolation. Therefore, interpretation is an act of active appropriation in which we construct culturally and historically defined landscapes.⁸ Gardens can be interpreted as living works of art, endowed with complex symbolisms. It is concomitantly a cultural artifact and an intellectual creation that reveals the relationship between nature and human beings.⁹

Contemporary debates that revisit the biopolitical role of plants broaden our perception of territoriality, as their roots and branches are not limited to physical and symbolic spatiality. This

spatiality plays a relevant role in extending notions of power to a socially designated environment. The exercise of this power takes place through borders, fences, and/or walls, and implies the differentiation between who is inside and who is outside,¹⁰ as well as control of the resources available. Gardens mirror society, revealing aesthetic preferences as well as social, racial, and gender stratifications. Gardens are spaces that concentrate botanical varieties based on ideological, political and/or economic motivation, proficiently revealing models of relationship established between human beings and the landscape at the level of materiality and ontology.¹¹ These perceptions influenced and still influence multiple parameters established for the representation and uses of plant life.

The appropriation of the landscape, symbolically and materially, reflects the perception of how taxonomies and classification models combined with the practices adopted for handling, cultivation, or extraction of plant species encompass complex issues related to colonial violence, assimilation, and hegemonic systems of knowledge production. The identification, classification, and transplantation of plant species can be interpreted as instruments of colonial domination, emblematic of the transformations and silencing imposed on the people who inhabited the conquered regions.

The cultural conquest of the Mexica illustrates this discussion. There are records of imperial gardens of great magnitude built during the Mexican reigns, such as the Tetzcotzingo garden located in the province of Acolhuacan and created in the mid-15th century. Other imperial gardens are Chapultepec and Huastepic. Creation of gardens in pre-Spanish invasion Mexico reveals hedonistic, sacred, political, functional, and symbolic dimensions,¹² mirroring and overlapping relationships between these spheres. The choice to build gardens in mountainous areas is linked to the relevance of caves and the mountains themselves as *loci* of the divine presence, of the abundance of water due to springs, and, therefore, conducive to fertility.

Unfortunately, there is a lack of material records that offer detailed information about the landscape design of these gardens, not only due to natural processes of transformation but also as a result of cultural erasure perpetrated by the interventions of the Spanish, with special emphasis on religious resignification followed by the consequences of the war between the United States and Mexico in 1846 through 1848.

However, there are prolific findings and records regarding cosmogonic beliefs as well as social and cultural practices of the Mesoamerican peoples. For the Mexica, for instance, flowers represented a synthesis of the universe, in which the axis mundi are structured. Xochitlalpan, in Nahuatl, is translated as *the land of flowers*. The floral universe is closely related to the history, beliefs, world views, and rituals of the Mesoamerican peoples. In the engravings and iconographies illustrated in the Codexes Sahagún, Badiano, Borgia, Bornoni-



Alexandra Lande
Blue House und courtyard of (La Casa Azul) 2022.
Photograph: Shutterstock, Web: 26 July 2025.
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cus and Vido-Bonensis, among others, myths, legends, and cultural characteristics prior to the arrival of the Spanish are revealed, intertwined with the symbolism and roles played by vegetal beings. The symbolism of the flowers also portrays the very conception of the world, described as a platform in the shape of a four-petaled flower.

In Mexica mythology, the world is represented as being suspended above a lake, supported by a tree that connects earth, heaven, and the underworld (Tlalocan, the realm of life after death). Added to this tree are four others, located in each corner of the Earth, symbolizing the cardinal directions. The Earth is subdivided into thirteen celestial layers, among which four are above ground, and nine are in the lower world. The trees that occupy each corner of the quadrangle communicate through the central point, enabling the relationship between the upper and lower planes. These worlds coexisted and gardens such as those of Tetzcotzinco, Chapultepec and Huastepc were communication links between these realms. Each garden gave greater prominence to the deities that governed the designs of each place. Knowing the characteristics of the gods, their attributions and forms requires understanding the mythopoeic explanations for the creation of different expressions of life, arising from a primeval sacrifice. The Mexica gods do not have unique forms; they are multigender beings who can use their powers to generate good or to arouse fear and punishment. Nevertheless, the perception of sacredness is omnipresent. Nature constitutes a vast and fertile space for divine manifestation, materializing immanence.

Mexica imperial gardens, in general terms, reflect the cosmos in miniature. The imperial gardens were also intended for royal families as a demonstration of strength and power. In these gardens, priority was given to the cultivation of ornamental, medicinal and hallucinogenic flowers. The richness of species and the magnitude of the gardens represented the spiritual dimensions and political power of the Mexica empire.

Kahlo's body of work and the garden at the Casa Azul establish constant references to Mexica myths, symbols, and cosmogony, representative of a sacred geography based on the flower *axis mundi*. The garden constitutes not only a *living museum* but also materializes philosophical and metaphysical quests present in the artist's oeuvre. By choosing to represent, adorn herself with, and cultivate botanical species defined as wild and/or native to her country of birth, she recognizes and asserts the agency and transformative potentiality of vegetal beings. The use of plant species as an expression of national identity and the representations of vegetal symbolisms in Kahlo's art are metaphors of Mexicayotl (Mexicaness).

The garden at Casa Azul

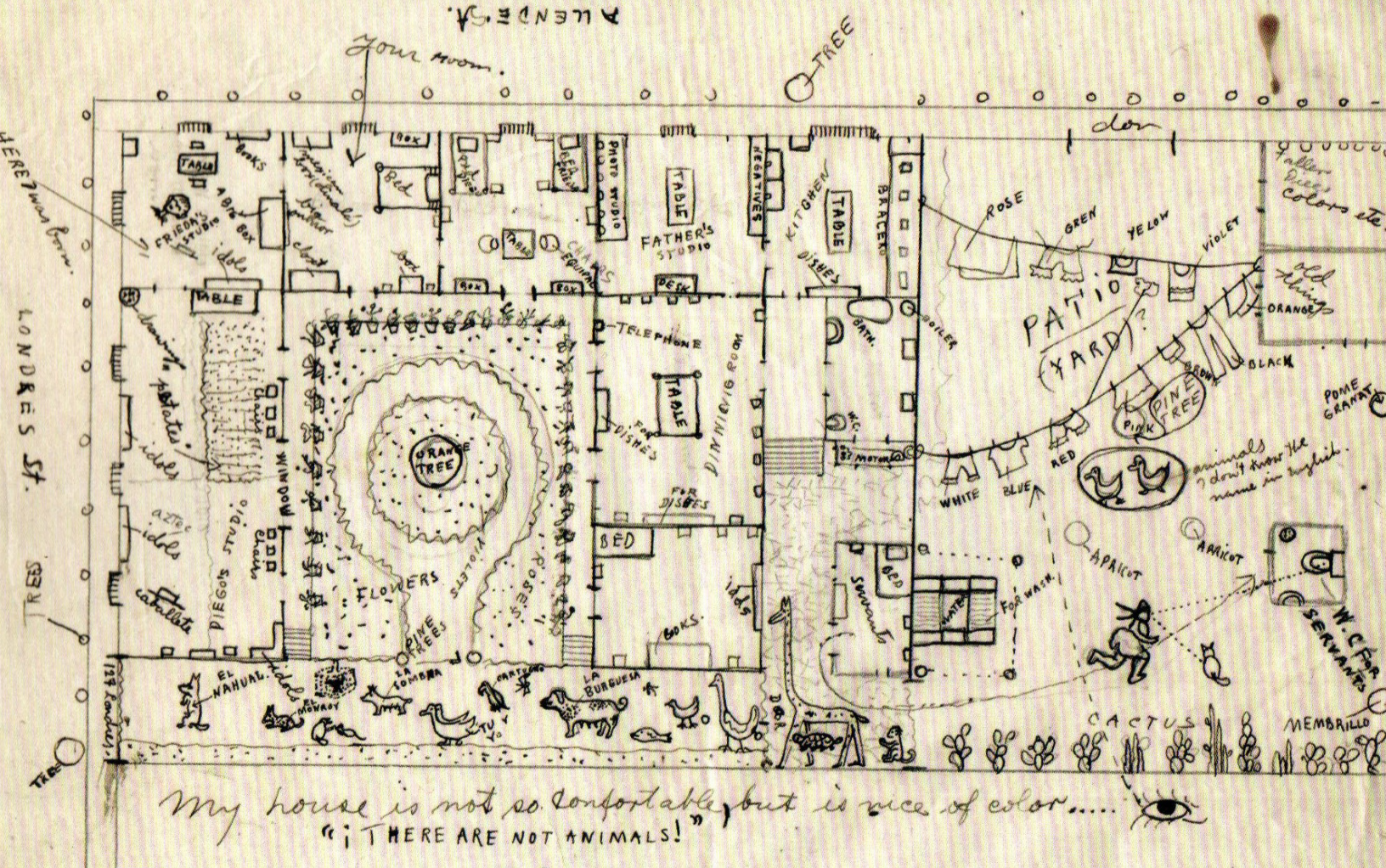
The property located in the Coyoacán region, ten kilometers south of Mexico City, between Londres and Allende avenues, was the home of Frida Kahlo for almost her entire life. The 1,200-square-meter lot was originally acquired in 1904 by Kahlo's father, Guillermo Kahlo. The architectural design of the house, whose structure was modified and expanded by the family over the years, is a mix of influences, including Spanish haciendas, the Arab inner courtyard modeled on buildings in Seville (Spain), and the Mexica imperial gardens. Among the botanical varieties identified in the Casa Azul garden, there are agave, organ pipe cactus, dahlia, sunflower, yucca, Mexican cypress, orange tree, orchids, palm tree, roses, ferns, and succulents.

There are no material records, sketches, or plans of the renovations made to the garden throughout the years,¹³ nonetheless archival photographs from different decades including by Guillermo Kahlo, Nickolas Muray, Wallace Marly, Gisèle Freund, Guillermo Zamora, Betsabeé Romero and Miguel Tovar offer the possibility of accompanying some of the transformations made to the garden, especially after Kahlo's and Rivera's marriage in 1929, when the ownership of the house was transferred to the couple who implemented a series of renovations, especially in the external area.

The garden was gradually ornamented with sculptures of pre-Hispanic origin and by local artisans, revealing the interest and appreciation of Mexican culture, as well as the encouragement for artistic production by contemporary local artisans, demonstrating Kahlo's commitment to her Mexican origins. Between 1936 and 1938, during the period in which the couple Leon Trotsky (1870-1940) and Natalia Sedova (1882-1962) remained as guests of Kahlo and Rivera, the garden underwent a significant increase. In 1939, potted plants such as geraniums gave place to agave, prickly pear, yucca, and cactuses, among other varieties.

To carry out the landscaping project at Casa Azul in the 1940s, as well as at the San Ángel studio house (built between 1931 and 1932 and in which Rivera and Kahlo lived for a short period), the couple hired a friend, Juan O'Gorman, who was an architect and poet. Helen Fowler,¹⁴ married at the time to O'Gorman, was an accomplished botanical artist and a specialist on the Mexican flora. She designed some of the landscape designs. Renovations placed a particular consideration on the materials used so that Mexican characteristics were evident, in addition to botanical species chosen associated with Mexico and Mexica mythopoeic legacy.

In 1941, a pyramid was built in the garden. The pyramid's architecture evokes the number four, representing the four cardinal directions and the four central gods of the Mexica pantheon. The pyramid was positioned between four flowerbeds symbolizing the four elements, fire, air, water, and earth, in addition to references



Suzanne Barbezat

Plan of the Casa Azul. Frida Kahlo, 1940. Frida Kahlo Museum, Coyoacán, Mexico City, Mexico. *Frida Kahlo em casa*. Brasil: Quarto Edit., 2018, page 128.

to pre-Hispanic deities. In the first flowerbed, there is the rain god Tlaloc. In the second, there is a sequence of skulls demarcating the relationship between life and death. The third is represented by the corn goddess Centeotl, establishing a link not only with the survival of the physical body, but with the food that provides sustenance for the soul and spirit through knowledge. Finally, on the fourth level, there is the feathered serpent Quetzalcoatl, the patron God of the Aztec priesthood.¹⁵

Kahlo showed great dedication throughout her adult life to the garden at Casa Azul, representing an extension of her artistic production. The artist made an illustrative drawing of the house in about 1940. In the sketch, there is an abundance of details to describe the flowers.¹⁶ On the left side line of the drawing, referring to the entrance to the house on London Street, as well as in the upper part, which represents Allende Street, Kahlo drew small circles identifying the existence of trees. In the central courtyard (portrayed in the work *My grandparents, my parents and I*, from 1936),¹⁷ numerous pots of sown plants that surround the garden

were drawn in addition to the orange tree, right next to the center, and the beds of violets and roses.

Glass asserts that Kahlo has rooted herself in the landscape through nature.¹⁸ By portraying natural elements such as vegetal beings, Kahlo sought an expression of life in a constant cycle of transformation. Furthermore, the importance attached to the garden is inherited from the Mexica perception in which there is an intertwining of the natural landscape with the spiritual dimension, creating a sacred geography. The analysis of Mexica mythology and cosmogony represents the guiding thread to explore the botanical representation of Kahlo, in the light of pre- and post-invasion Mexican history, and the symbolisms expressing a link between past and present, offering paths to the realization of the idea of a pre-Columbian identity that is updated in post-revolution Mexico.

The representation and planting of a garden evokes ideas of continuity and the belief of renewal and transcendence in the face of death. For the continuity of a garden, time, resources, planning, and constant maintenance are necessary so that flowers and plants can grow, flourish, and generate new offspring. The assertion that Kahlo paints flowers so that they will not die¹⁹ as revealing of the painter's obsession with death, it seems to be disconnected from such emphasis given to the creation and care of a garden, whose composition can be perceived as a continuity of her existence. In other words, one could argue that although the physical body no longer exists, the garden is an extension of her materiality. The garden, as a space in constant transformation, is representative of a temporality not limited to the time of those who sow or maintain it. Opposed to immortalizing time, it is a way of learning about the continuous transformation and passage of time, which takes on new shapes, colors, and textures as it grows, withers, and is subsequently reborn. Or, as highlighted by Cooper,²⁰ each visit to a garden is a unique experience that cannot be reproduced.

The garden at Casa Azul, since it was kept as close as possible to the imagery proposed by Kahlo during her lifetime, offers the sensation of having interrupted the passage of time, evoking her presence and the symbolisms that shaped the artist's choices. Despite reconfigurations due to natural changes and maintenance, the garden constitutes a relevant part of Kahlo's production, representing artistic and ideological preferences. Therefore, it configures a metalanguage based on the fusion between space, objects, biography, and symbols that were part of Frida's intellectual and artistic inspiration, in which nature plays a prominent role. Kahlo's botany, on the one hand, uproots conceptions of nature disassociated from a particular cultural setting, while on the other, it locates and contextualizes it through botanical varieties associated with the Mexican imaginary, expressing a union of activism and a social place of action".²¹

Conclusion

This article is based on the doctoral dissertation *Weed Garden: Symbolisms and Botanical Representations in the Art of Frida Kahlo*. The research was a process that resembled working with flowers (which I have dedicated myself to over the last 15 years), i.e., a constant dialogue with complex forms of life that provoke and enrich our knowledge and metaphysical experience(s) about nature.

The initial assumption was that the representation of vegetation, as conceived by Kahlo, could be interpreted and analyzed independently of her self-representation. However, the research has led to a different conclusion. By excluding the artist from her works of art, the metaphysical quest, in which nature plays a prominent role, philosophically, spiritually, and politically, is considerably emptied. In turn, the garden reclaims a place of its own, as a living *memento mori* and a continuity of Kahlo's work.

The idea of 'rebirth', as it relates to the Mexican experience in the early 20th century, is tied to the possibilities of formulating and experiencing a neo-Aztec project, which envisions a reconnection with values and worldviews dissociated from a theoretical-symbolic framework of the colonizer. Furthermore, it is based on shared symbolisms and the absence of absolutes, which allows the past to be manifested in the present, and of an existence integrated with the idea of non-homogeneous unity, combining all living elements in a shared cycle of existence. Regeneration is equally manifested in the lack of distinction between mythopoetic explanations of everyday reality. It does not imply that the creation of the universe fostered by the sacrifice of the gods is adopted literally, but it does update the relationship with the past, with cultural heritages, and with a sense of shared identity, despite socio-economic differences.

By emphasizing the representation of flowers and foliage that grow in distinct Mexican regions, in unconfined areas, vacant lots, fields, and roadsides, she recognizes their agency and transformative power. The body-vegetation manifested in a poetic temporality of resistance expresses and establishes itself in the fissures, performing a material significance. By hybridizing and intertwining with plant forms, she transformed her body into a symbolic and metaphorical narrative of reconnection, blurring the boundaries that separate human beings and nature, body, and territory, in a transgeographical movement of self-representation, equally manifested in her paintings and garden.

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Caroline Rothwell

Lung, 2021, canvas,
gypsum cement, stainless
steel, paint, mixed media,
118 x 65 x 40cm.

Photo: Felicity Jenkins

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Plant signatures, goodness, and the dose

The Doctrine of Signatures is the idea that plants that look like parts of the human body can cure ailments in those bodily parts. This essay first establishes a connection between the understanding or recognition of plants and the use of plants as a medicinal cure, tracing the Doctrine's origins from Roman and Medieval times to the Renaissance physic or apothecary gardens. The second part focuses on the Australian artist Caroline Rothwell whose engagement with the Doctrine of Signatures helps draw connections between the doctrine's religious underpinnings and contemporary interpretations of what a signature signifies regarding human and ecological fragility. Signatures are intimately connected with the concept of goodness, a moral concept that has long been associated with gardening constructs and of plants themselves.

text: Prudence Gibson and Sigi Jottkandt
images: Caroline Rothwell

In Renaissance Europe, physic gardens were established to cultivate herbs and plants for their medicinal and curative value. As precursors to botanical gardens, which were more focussed on design aesthetics, collecting practices, and rare specimens, the physic gardens were intent on showcasing the healing properties of plants.¹

A precursor to the medicinal concerns of the physic gardens was the practice of the Doctrine of Signatures. This Doctrine involved recognising plants that could cure human ailments, based on the appearance of those plants. Understood since the 19th century as an outmoded and even foolish practice, the Doctrine is worthy of attention and renewed focus because of its capacity to 'know' plants deeply as a professional practice.

This essay investigates the Roman and Medieval history of the Doctrine of Signatures that informed the Renaissance physic or apothecary gardens. It establishes a connection between the understanding or recognition of plants, and the use of plants as medicinal cure. It notes that these plant-medicine habits endured for up to 1800 years. In particular, it focuses on what a plant signature means or signifies, both in a historical and contemporary sense.

As part of researching the Doctrine of Signatures, this paper also brings plant-human systems into the present by focussing on Australian artist Caroline Rothwell, who has made many works about the Doctrine of Signatures over the last 15 years. Our argument connects the religious connotations of the Doctrine of Signatures with more contemporary associations of what a signature signifies and tells us about human and ecological frailty. It also connects signatures with the concept of goodness, a moral concept that has long been associated with gardening constructs and with plants themselves.

The Doctrine of Signatures is an area of plant study that emerged in the European first century AD and became extremely popular in the 16th to 18th centuries. For instance, a plant that looks like an eye, such as the bulb cross-section of the fennel, can cure eye problems. Kidney beans are good for the kidneys. Gelsemium roots look like brains and can cure facial pain and migraine. Pomegranate arils look like little teeth and pomegranate placentas look like gums, so the idea is that pomegranates could cure dental problems.²

Following the Doctrine of Signatures, each plant is thought to be a signature or map, based on the way its roots, stems, branches, flowers or fruits appear. That signature signifies human ailments and is the key to a means of plant medicine for humans. In effect, it is a double mapping of plant and human bodies.

History of the Doctrine of Signatures:

To briefly explain the history of the Doctrine of Signatures, we must visit Dioscorides, the first proponent of the Doctrine. Dioscorides AD 40-90 believed that the *Scorpiurus muricatus* plant was good for curing scorpion stings, due to its prickly scorpion-like tail. He noted that avocados can cure illnesses of the womb. Bloodroot (which has red roots) is good for the circulatory system. Ginseng root looks like a human body and is considered good for human vitality and the overall vascular system. Dioscorides noted these likenesses in his botanical and medicinal book, *De Materia Medica*, which launched a study of plant medicine that lasted 1800 years and influenced both western and eastern medicine.³

As early as 1290, the Italian doctor Guilielmus of Saliceto referred to signature qualities in a treatise on medicinal plants. His treatise was called the *Doctrine of Correspondences*. In this text, he noted that liverwort leaves



S. Parkinson del. 1770
F. P. Nodder pinx. 1777

PLATE 72

D. MacKenzie sculp.
Caroline Rothwell 2019

HARDENBERGIA VIOLACEA (Schneevoogt) Stearn
Hedysarum monophyllum

Botany Bay, Australia
28 April-6 May 1770

look like livers and could treat diseases of this organ.⁴ Saliceto's doctrine was interesting because it made a connection between attributes of the physical world and made corresponding connections with things in the spiritual world. These connections were symbolic. The implicit suggestion was that these were hierarchical relations, passed down from the spiritual world to the physical world.⁵

While the Doctrine of Signatures has been debunked as spurious since the 18th and 19th centuries, it offered pre- and non-literate people the mnemonic means of remembering which plants are good for what, in terms of curing ailments and maintaining good health. It was a means of connecting humans closely to plant life, and generated a substantial respect from humans towards plants, much of which is lost to many humans today.⁶

The Doctrine of Signatures was taken up again in earnest by Paracelsus (Theophrastus Bombast von Hohenheim), a 16th-century Swiss physician and alchemist. He further developed, in *Die Grosse Wundartznei* 1537, the concept that the appearance of a plant could indicate its medicinal use.⁷

This was a period of history that was dominated by ideas of nature as being the dominion of man. English philosopher Francis Bacon 1561-1626 was a significant proponent of the idea that God would provide, and this provision was divinely ordained and a sacred duty.⁸ After the Judaeo-Christian fall of man, the relationship between nature and man changed. The ultimate Garden of Eden human failing was a transgression against God. As theology became accepted cultural wisdom, human connection with the natural world became one of moralising separation, of human dominion and of utility. Colonial rapacity increased and so too did nature become perceived as existing for the use of man, often verging on a form of violent dominion. Consequently, man (not woman) could only be the executor of god's will – this included human relations to nature.

Within this moral historical context, where human-plant relations were shifting towards a more hierarchical and religious order, Giovanni Battista della Porta wrote about plants, animals and humans and how their outward appearances affected behaviour. His extrapolation of plant signatures became his treatise *Phytognomonica* in 1588, which contained many illustrations of the Doctrine of Signatures.⁹ In the same period, German philosopher, mystic, and theologian Jakob Boehme wrote *The Signature of All Things* in 1621.¹⁰

In 1684, English botanist William Coles 1626-1662 declared,

Though Sin and Sathan have plunged mankinde into an Ocean of Infirmities, yet the mercy of God which is over all his works, maketh Grass to grow upon the Mountains, and Herbs for use of man, and hath not only stamped upon them a distincte form, but also given particular Signatures, whereby man reade, even in legible characters, the use of them.

Coles referred to medicinal plants as 'simples'.¹¹ A strong connection emerged in this later period of the Doctrine, creating a link between religion and plant characteristics. Most of the Doctrine of Signatures plant treatises or books focussed on plant parts that helped humans, specifically for medicinal cures. This was a focus on the moral goodness of nature. Nature was good, man was bad (due to the original sin and fall of mankind) but the goodness of plants could serve as a kind of salvation, by healing human flaws.

While the Doctrine mostly focuses on the moral good of plant life, there were examples of 'bad plants.' Paracelsus was one of the few writers who also extended cures to kill, where all things are poison, and nothing is without poison.

Underpinning the Doctrine of Signatures is the trope of mimesis, which finds its way into Doctrine as a special form of magic. What looks 'like' something else has a necessary connection to it, allowing one thing to imbue another with (some of) its properties. Hence, rather than a passive figure - reflection merely reproducing what it finds outside itself - mimesis hides within itself an active principle. What it touches, it transforms. Mimesis is a fanged phenomenon, secreting its 'pharmakon' into the unsuspecting world.

One form of magic at issue in the Doctrine is what James Frazer, in his famous book *The Golden Bough*, named homeopathic magic. This works according to the "Law of Similarity" where an effect is produced through the act of imitation. One can adopt this Law for one's own purposes, both curative and nefarious. "The magician infers that he can produce any effect he desires merely by imitating it", explains Frazer.¹²

The other operative magic in the Doctrine is what Frazer names "contagious" magic. Its principle is contact or presence. It assumes that objects that are brought into proximity with each other will activate an ancient "sympathy" they once possessed with each other. To be cured by a plant on the basis of contagious magic is implicitly to return one's body to an earlier state of equilibrium with the world. Contagious magic repairs the division instituted by distances of space and time. It states: things that have once been conjoined will ever be so.

The signature

The human signature can be seen as a form of mimesis, a physical extension or signification of the self, something that is copied out, over and again. The idea of the signature as a form of personal or individual identification dates back to the Antiquity of 3000 BCE, when stamps or seals were imprinted to convey meaning. By the late 11th century, there were known examples of documents being signed in Latin alphabets. Not many members of European society had access to the Latin language, whether reading or writing.¹³

The signature is a guarantee of identity, but it is also a suggestion of ownership, plausible power and dominion. One of the first recorded signatures dates to 1098 when the Spanish military leader El Cid signed a document regarding his donation to the Cathedral of Valencia. Signatures were slowly introduced as objects that connect to subjecthood. By the 17th century, it became a more common practice to require signatures for letters and contracts. In 1677, the Parliament of England enacted the *Statute of Frauds*, which required that all legal documents including property transactions, wills, leases, etc. be written and signed to avoid fraud on the court. It was done in an effort to replace X's and wax seals still commonly used at the time.¹⁴

While signatures are associated with identification, guarantee, advocacy and ownership, they are also associated with deception and fraud. Signatures are forged. Signatures are misused. If the signature is the sign, then it stands in for something or nothing. This uncertainty can be abused. The person who signs is a guarantor, but what is being guaranteed? For Jacques Derrida, the signature registers the absence of the one who signs. To sign, he explains, "is to produce a mark that will constitute a sort of machine which is productive in turn, and which my future disappearance will

Caroline Rothwell

Proflift fern, NZ (after Banks Florilegium), 2021,
canvas, hydrostone, steel, metal
leaf,

83 x 21 x 15cm

© Caroline Rothwell



not, in principle, hinder in its functioning”.¹⁵ A signature participates in the wider structure of distance, divergence, delay, deferral that Derrida calls “writing”. Its very principle of readability and repetition makes it uniquely vulnerable to a *force de rupture* which severs the sign from its context: “No context can entirely enclose it. Nor any code”, Derrida comments.¹⁶

In 2009, Giorgio Agamben wrote *The Signature of All Things: On Method*, taking his title from Boehme’s previously mentioned *The Signature of All Things* (1621). Here Agamben focuses on the archaeological vigilance – a science of signatures that is more than the individual signed object, that exceeds the unmarked signs that signify.¹⁷ For Agamben signatures are not just marks but a primordial force of being: “Every phenomenon is the origin, every image archaic”.¹⁸

While this sounds like it might exist beyond an individual signatory’s reach, it is important for returning to or attuning to the complexity of the plant world and their own structures of identification and individuality. Plant signatures are primordial forces. If a plant communicates to a bee, it is emitting a gas or chemical signature that is recognised by the insect. When bioelectrical data is being recorded by ecological scientists, they refer to that data as a plant’s or a tree’s signature.¹⁹ Beyond human concepts of identification and power, the signature is also a method of particular communicative information.

Finally, the signature within the Doctrine of Signatures is afforded to plants, by humans, as ordained by God. It is only through the gesture of God and the interpretation of man that a plant has the capacity to cure humans. There is room for controversy here, in terms of who interprets God’s divine salvatory knowledge and who shares that ordained knowledge with the caretakers of the medicinal plant gardens.²⁰

Medicinal physic gardens

John Gerrard’s famous 1597 book, *Herball*, was catalogue of physic gardens across Europe, including over 1000 plants from his own physic garden at Holborn in London.²¹ The Chelsea Physic Garden, created in 1673, is a walled garden in the centre of London. The walls create a microclimate.²² These physic gardens have attracted scholarship due to associated colonial issues of avid and rapacious plant collection from less powerful countries, the philosophical instrumentalization of plants (the idea that plants are being exploited) and related colonial-era violences.

Added to that is the layer of aesthetic scholarship, whereby the design of orderly and manicured gardens that exhibit rare and exotic plants, is a drive to a better biblical past. As John Prest said in 1981, the will to collect from far and wide was to recreate the Garden of Eden.²³ This recreation or yearning for a perfect Edenic past is less obvious in physic gardens, compared to botanic gardens, because the collection, ordering and use of plants is purposefully directed towards human medicinal cures.

The interests, in this essay, are the physic gardens that are connected with the Doctrine of Signatures. In that vein, Hildegard von Bingen, who was a Benedictine abbess, founded three monastery gardens, one being at Ruppertsberg in 1150 in the Rhine Valley, and another on banks of the river and then Eibingen in 1165.

Von Bingen was drawn to the Doctrine of Signatures through her profound belief in the interconnectedness of all things. She wrote in her book *Physica* about *viriditas* as greenness and energy. In Michael Marder’s view, Von Bingen had deeply interconnected views of the cosmos as part of her ecological theology.²⁴ She saw the human body as microcosm of nature, and of the universe. Like other proponents of the Doctrine of Signa-

tures, she believed that the fall of man caused diseases, but God planted curative properties for human salvation.

Von Bingen wrote about 230 plants and grains in *Physica*, which had nine categories, including stones, elements, fish, birds, trees, and plants. She said, "Let a man who has an overabundance of lust in his loins cook wild lettuce in water and pour it over himself in a sauna". She noted that fennel was good for eyes, digestion and respiration.²⁵

We leave the physic garden, not so much as sites of conflict or even desire. Instead, these medicinal gardens, that drew upon the Doctrine of Signatures, were concerned with medicinal cure, in the name of God. That medicinal curiosity endures today.

In addition to medicinal properties, the Doctrine is a reminder that a recognition of human quality in plants is also a recognition, per-versely, of otherness. The desire to see ourselves in plants is an admission that we ultimately cannot.

The artist

An artist who understands and recognises plant otherness is Australian artist Caroline Rothwell. Her sculptural and two-dimensional works are known for their technical acuity, historical references, sharp intellect and merging of art and science. She presents a subversion and reclamation of plant cures, within a climate context. Through her artworks, she consistently enquires about the patriarchy associated with the Doctrine of Signatures and what part imagination can play in an artistic interrogation.

English-born and educated, Rothwell spent several years in New Zealand before consolidating her art career in Sydney. But her life in rural England lingers:

My Irish mum grew as much as feasibly possible and fed us her vegetal wonders and medicinal plants: redcurrants, loganberries and blackcurrants for vitamin C, runner beans, marrows, an endless supply of heritage potatoes, spring onion, tomatoes, thyme and mint. She stored green beans throughout winter in vast ceramic jars, in layers of salt. Our garden was amazing. A quarter of the garden was veggies. And, so many flowers - foxgloves, holly (a poison), opium poppies, tulips. A walnut tree, veggies pickled in vinegar. Damsons, quinces, hops for beer and apples. To my mum, opportune plant cuttings were 'volunteers' in her hardworking garden.²⁶

Rothwell reclaims the Doctrine of Signature. Her curiosity about the scientific histories of plants often involves a disruption or inversion of plant-human relations. For instance, her lung-like plants are hung upside down. Her tree-like humans represent human exceptionalism but also create a tempest of not just imagination but of weather-like thought, of elliptical imagination. Her sculpture's fingers are roots

Perhaps her most difficult works are the controversial Banks Florilegium cut-outs. The Florilegium is a book of copperplate engravings of the plants that botanist Joseph Banks collected during the Captain Cook voyage of 1768-71. These are controversial in Australia because Banks is now known as a figure who extracted wealth in the form of plant knowledge, without permission and without acknowledgement.

Rothwell says, 'I love and loathe Bank's florilegium. They're epically beautiful and I am fascinated by their knowledge, representation and

understanding of botany. At the same time, I see them as one of the first acts of colonial stealing. Re-naming, re-imagining, re-viewing'.

Her Banks botanical images are snared by human tongues. Caroline's aesthetic image of the tongue is an ongoing emblem in her work, but here, leaf and tongue are the same. The tongue form is political for Rothwell. 'It's about colonial collectors who are grabbing elements of culture. On first contact at Kamay (Botany Bay), while Joseph Banks was busy collecting plant specimens, the Gweagal spears, were being taken by Endeavour's crew (and just this year returned from Cambridge University to La Perouse Aboriginal community). Curios for English visitors but so significant for Australian Indigenous community. The tongue is love and speech and greed and lashing.'

In Rothwell's work, *Proplift Fern (after Banks' Florilegium) 2022*, plants are proposed as systems of plumbing or industrial activity but they are still part of the connected knowledge of the Doctrine of Signatures. Plants and human activity are merged just as the Doctrine's likenesses connect plants with humans. *Tulip Tongue (after Maria Sibyl Merian) 2019*, presents plants and domestic bathroom taps and reflect the damage done to our water supplies, our rain sources and weather patterns. The elements also represent the structures and infrastructures of contemporary lives, as connected with past structures that were more enmeshed with nature and old knowledge.

Rothwell says,

I see the Signatures of Plants as this weird connective tissue where there was vast plant knowledge and a recognition of the value of plants. And from the perspective of now, the uncanny aesthetic and pseudo-scientific method connects us to stories of plants. I am interested in the surreal aesthetics, strange poetry and that sense of connection within the Signatures, but I have a double-edged relationship with the Signatures, as it is still anthropocentric and centres the human - the aim of plants is for use by humanity. I want to see plants valued as the operating system of our planet.

The artist uses the Doctrine of Signatures as a surreal, scientific and poetic reference to create a sense of interconnection and multi-species alignment. In her *Industrial Botanical, 2020*, the heart-shaped leaf could also be brain matter. The tap is now a filtration system mimicking the photosynthetic absorption, transport and transpiration of water. Here, there is a different kind of knowledge; it is not quite a *Materia Medica* pharmakon but there is still evidence of a pharmacopeia. There is, implicit in her artwork, a suggestion of a cure for an epoch of climate damage.

When we visited Caroline Rothwell, she showed us a fascinating little book that belonged to her great aunt, Ivy Drought. The book is called *The Ghost of my Friends*. Putting aside how fantastic her aunt's name was, this little book, small enough to fit in your hand, is a book of signatures. Ivy Drought's family and friends wrote their names using a fountain pen, across a middle line of each page. Then Ivy would fold over the page before the ink dried. This created a series of signatures that look botanical.

Each page of smudged signatures looks like a plant, but it also looks like a Rorschach blob. Rothwell has used the Rorschach image a lot in her work to abstract and to shift the representation by turning it into pop psychology. She says "I suppose plants frequently have somewhat mirrored sides like a Rorschach".

We asked her whether these Rorschach images are formed from any

Caroline Rothwell

Tulip Tongue (after Maria Sibyl Merian), 2019,
hydrostone, aluminium, canvas,
epoxy glass,
stainless steel, brass,
90 x 36 x 27cm
© Caroline Rothwell



significations and whether they are meant to be seen as plants or hovering on the border between human signature and plant form. Rothwell said, "I'm worried about the signature of plants because humanity is always centred. But then I'm less worried, because if we can see ourselves, then we can see a point of care. There is an uncanny familiarity of the plant/human into the contemporary surreal, which feels connected and so necessary for now".

Conclusion

The Doctrine of Signatures grew into physic gardens. The physic gardens grew into contemporary pharmacology. The mycelium of these plant humanities 'growths' creates significant and ongoing meaning between plants and humans. Each signature signifies a new plant-human relation and this has endured over thousands of years. The gardeners, the apothecarists and the artists are best at identifying the signifying relations.

While the authors are not suggesting a return to the Doctrine, there is an important lesson to remember from its activity: plants are the key to all life. They signify life and they teach humans how to live.

The English word garden is said to come from the Proto-Indo-European root *gher-*, meaning "to grasp, enclose". The garden, with its assumptions of order, symmetry, clarity and single-point perspective, yields to another principle.

Released by the Doctrine's mimetic magic, signatures fly off from their sheets like strange typographical insects; Rothwell's tongues murmur in an unintelligible language. How are we to grasp this art? What kind of gardener can make sense of such things? The plant that was to mirror us turns its back. It is no longer we who predicate or signify.

Perhaps we never did.

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Planning a natal garden

In planning a natal garden Martina Hynan strives to generate an expanded understanding of natality that reflects the interconnectedness of people with ecology. Such an environmental perspective on birth acknowledges the complex interdependency of human and non-human needs in a multispecies world. The planning of this natal garden is divided into two phases; firstly, a container garden, secondly, a garden located within a community environment. Making this natal garden is a slow art project intended to cultivate an expanded understanding of natality for a more-than-human world.

text and images: **Martina Hynan**

Natality, the question of what it means to be born, is central to my work as an artist, researcher, and birth activist. Natality is traditionally associated with human birth, yet, for me, a more expanded notion of natality as part of a more-than-human world reframes what it means to be born and reimagines it as a reciprocal co-creative ecological process. Historian and philosopher Hannah Arendt's thinking on "natal notions" proposes that the act of being born demonstrates the capacity to begin anew. Arendt further asserts that by embracing this symbol of new beginnings, it should inform political action.¹ It seems to me that natality for a more-than-human world moves beyond the parameters of inherited human-centric ideologies based on human exceptionalism. In my work, I am striving to cultivate an expanded notion of natality, and this way of thinking is informing my plans for a natal garden. In the natal garden of my imagination, humans and non-humans are working co-creatively to generate healthy soil, healthy plants, and healthy people.

In planning a natal garden it would be relatively easy to list herbs suitable and helpful during pregnancy and to list galactagogues that would help breast or chest feeding. In fact, this was the first thought I had when I began to think about making a natal garden. However, I think this approach remains too overtly human-centric. Instead, I am taking a slow art approach to planning this garden. I am thinking about how I can make a garden that recognizes the reciprocal interconnectedness of non-humans with humans, that nurtures the multispecies gestation and birth. However, the natal garden of my imagination does not yet have a home; it does not have a physical location where I can truly begin to make a co-creative nurturing environment. Instead, I am beginning this new speculative venture as a container garden of sorts. More about the mutual reciprocal attributes of these containers will follow. At this preliminary stage of my garden plan, I am happy for it to be a container garden because I think that this is a fitting metaphor for the predicament that pregnant people face within contemporary maternity care systems.

Birth has been irrefutably separated from the place; tracing this separation process was part of this research. However, now, I am very

keen to explore ways to highlight this rupture of birth from place in more creative ways. And so this article sits between speculative imagination and preliminary research and development of this new artistic project. My understanding of place builds on physicist and philosopher Karen Barad's theory of spacetime mattering. They assert that "space, time, and matter are intra-actively produced in the ongoing differential articulation of the world".² Barad's term "intra-active" proposes that the human is in an ongoing exchange with its environment and vice versa. This reciprocal understanding of place, and consequently birthplace, is part of the ongoing process between space, time, and matter.³ To create a garden that focuses on the interconnectedness of space, time, and matter is key to planning the natal garden of my passion. However, as I do not yet have a physical site where I can create a garden, I have decided to divide this project into two phases. In phase one, I will create a container garden, and in phase two, I will create a garden within a community setting.

Phase one of this natal garden will be called Leto's Garden. Leto is a Greek Titaness and the mother of twin Olympian Gods, Artemis, and Apollo.⁴ The part of Leto's story that fascinates me most is that she was forced to wander the earth during her pregnancy and potentially when in labour. This was because Hera, Zeus' wife, in a jealous rage forbade any land from giving her refuge during her pregnancy. Leto eventually found the island of Delos, which was thought to be a floating island, and therefore not in breach of Hera's decree. One version of this myth tells us that Leto's sister, Asteria, turned herself into a floating island to avoid the attention of Zeus, and this also helped her sister Leto find a place where she could give birth.

The myth of Leto birthing on the untethered island of Delos is a metaphor for the rupture of people from place during the critical event of birth. An untethered island drifts freely, unanchored, isolated and this is a fitting allegory for the hegemonic view of the bounded birthing body. Retelling this myth in relation to the making of container gardens is an opportunity to draw attention to the limitations of boundaries in a multispecies world. While the container garden mirrors how we cultivate life, meaning, or beauty in constrained or portable forms, it too is a form of bounded body. The container garden is a self-contained ecosystem, detached from the earth beneath, yet still growing, blooming, and alive.

Both Leto and the natal container garden exist independently of the traditional grounding forces: the island from the mainland, and the garden from the soil. They are acts of resilience, of curated survival, shaped by what's within rather than what's around. Sadly, I believe that their acts of resilience echo the stories of many birthing people today as they navigate the maternity system. Creating a container garden is a symbolic gesture towards honouring the challenges pregnant people face within the current dominant institutionally based maternity system, which is echoed in the story of Leto. This container garden is a reminder of just how untethered pregnant people are within the current maternity care system. One key finding of my recent PhD research, which interrogated the separation of birth from place during the twentieth century in Ireland, is that we have forgotten that birth is an ecological process and event. The institutionalisation of birth relies on perpetuating a form of human exceptionalism that denies the significance

of place in the process and event of birth. This rupture of birth from the place is part of greater concerns about the impact that human exceptionalism has had and continues to have on the environment. For me, rethinking birth with place is part of the desire to reimagine the human with the non-human as part of a more-than-human world.

Leto is known as 'the hidden one'; this title reflects her fugitive state, and it is this situation that I contend best resembles the experience of pregnant people today. Since the mid-twentieth century, the separation of birth from place has become the norm, so much so that in Ireland for example, 99% of births take place within hospital settings, many of which are up to two hours' drive from people's homeplace. Pregnant people, just like Leto, are forced to travel long distances to access support during pregnancy and birth. A form of forced relocation is built into the existing maternity system, making all pregnant people fugitives from their local environment during this vital event. Yet, this is entirely hidden and or overlooked within maternity care systems.

The title of my PhD thesis, *"On the wisp": Rethinking birthplace in Ireland for a more-than-human world*, is an interdisciplinary research project with art practice project that interrogates the rupture of birth from place. In Ireland, the once commonplace phrase "on the wisp" or "on the straw" described how women often gave birth to straw. For me, this phrase is a reminder that being born was embedded within the materiality of place. It is a reminder that people lived an interconnected life entangled within their homeplace; it is a further reminder that birth is intrinsically ecological. It is this entwinement of pregnant people with place that is shaping my speculative plans for creating a natal garden. For me, planning this garden requires developing a sympoietic way of thinking about both natality and gardens.⁵ At the core of this plan is the recognition that birthing bodies and their physical environment are in an ongoing exchange with each other, and so at this preliminary planning stage, it is important to recognise this co-creative, this sympoietic ongoing exchange between humans and non-humans as integral to the act of being born. Planning a natal garden, therefore, considers how pregnancy, birth, breast and/or chestfeeding are sympoietic acts. Feminist Environmental Humanities scholar, Donna Haraway, describes sympoiesis as:

a simple word: it means "making-with." Nothing makes itself; nothing is really autopoietic or self-organizing... Sympoiesis is a word proper to complex, dynamic, responsive, situated, historical systems. It is a word for worlding-with, in company. Sympoiesis enfolds autopoiesis and generatively unfurls and extends it.⁶

Haraway's 'sympoiesis' has become central to my thinking about birth, about place, and about natality. The process of being born, seen through a sympoietic lens, acknowledges that this is a co-creative process and event. To me, this description of sympoiesis supports a way of rethinking natality as part of a more-than-human world. Sympoietic thinking helps to challenge human exceptionalism, such as the human-centric basis of the dominant Western medical model of maternity care. I am conscious that creating a sympoietic natal garden that emphasizes pregnancy, birth, breast and/or chest feeding appears to be human-centric in focus, and so

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Holobiont Bowl, straw pulp with
plant, soil and stone matter,
2022

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this is why I am slowing down the planning process of this natal garden so that I can consider the sympoietic processes at work within the exchange between the human and non-human. I realise that each stage of human gestation, birth, and feeding is entangled, and I think that by thinking with an entwined natality, there is the possibility of decentring the human and expanding the understanding of natality as part of a more-than-human world.

The emerging vision for a sympoietic natal garden is one where the reciprocity of humans with non-humans is understood as germinal and foundational to an expanded comprehension of natality and of gardens. Returning to the phrase “on the wisp” or “on the straw”, straw has become both the matter and metaphor for planning this garden. Straw has healing properties for both humans and non-humans, and an acknowledgement of these reciprocal healing properties can be found in its contemporary use in the Straw Incorporation Measure (SIM). This initiative pays farmers in Ireland to add straw to their land to improve the soil quality. The Irish Farmer’s Association (IFA) says that this scheme “seeks to support tillage farmers in undertaking actions which will increase soil organic carbon levels and deliver reductions in GHG emissions”.⁷ This scheme recognises the healing properties that straw has for soil structure.

Additionally, it has been pointed out that straw has healing properties for humans: straw is used in medicines, and wheat straw is recognised as having direct health benefits when chewed.⁸ The reciprocal healing properties of straw as part of an ongoing way of living with the materiality of place changes our relationship with straw. It is no longer an agricultural by-product but a healing material for both humans and non-humans. I am reminded that straw was ubiquitous within the Irish home, so that during pregnancy and birth, a reciprocal relationship was established. This way of thinking moves our relationship with birthing bodies from an isolated entity towards a reciprocal co-creative relational one, such as that proposed by evolutionary developmental biologist Scott Gilbert’s theory of the holobiont. Gilbert argues that human pregnancy is “an amazing co-metabolic situation”.⁹ He asserts that “symbiosis is the way of life on earth; we are all holobionts by birth”.¹⁰ Gilbert’s statement that “we are all holobionts by birth” affirms a reciprocal relationship between the human and non-human, including birthing people and straw.

I made holobiont bowls during my PhD research. It was made by wrapping straw pulp around a stone and represents my thinking with the work of Donna Haraway and Scott Gilbert. These holobiont bowls are a gesture towards the ongoing exchange between matter, in this instance, between straw and stone. A holobiont is the coming together of a host with many other species which together form an ecological unit through symbiosis. Gilbert argues that “human pregnancy [...] is an amazing co-metabolic situation [...] “birth” is not the birth of a so-called individual. Birth is the continuation of the holobiont community”.¹¹ The holobiont bowl is a metaphor for Gilbert’s assertion that “birth is the continuation of the holobiont community”.

Rather than focusing exclusively on the health benefits of a natal garden for humans, I am starting this creative project thinking with straw and soil. Feminist environmental theorist Maria Puig de la Bellacasa’s work on soil care explores the significance of a more-than-hu-



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Making a holobiont bowl, straw pulp wrapped around stone, 2022
stainless steel, brass, 90 x 36 x 27cm © Martina Hynan

man engagement with soil that challenges human exceptionalism approaches to ecology. As they state, “what soil is thought to be, affects the ways in which it is cared for, and vice versa, modes of care have effects in what soils become”.¹² Thinking with Puig de la Bellacasa and Haraway, who assert that, “philosophical and materially, I am a compostist, not a posthumanist. Critters – human and not – become-with each other, compose and decompose each other”.¹³ Haraway’s concept of compost and composting is part of a theoretical framework in which to rethink the entanglement of bodies with matter. She goes one step further and declares that “we are compost, not posthuman; we inhabit the humus-ities, not the humanities”.¹⁴ It is her assertion that critters, ‘human and not-become-with each other’, that is informing how I approach the making of a natal garden.

One early experiment I conducted was to use a holobiont bowl to plant borage seeds. These bowls create a form of container garden that is not rooted in a particular location, yet there continues to

be an ongoing exchange between the matter of the straw, soil, and seeds. Creating holobiont containers is a reminder of the sym-poi-etic exchange between matter. These bowls sit on the land; they are not rooted within it. This, for me, is a metaphor for how human birth is removed from its community. This separation of birth from place is reinforced in Leto's story. This combination of metaphor and myth is intrinsic to phase one of this slow art project.

Watching the borage seedlings sprout and knowing that unless I located them within an environment where their tap roots could extend beyond the boundary of the straw, they would not grow and flourish was a concern for me. With the right conditions, these borage plants could develop deep tap roots that would help to aerate the soil, increasing soil structure and increasing water and oxygen, thus affirming a sym-poi-etic relationship between the borage plant and the soil. If I don't allow this to happen I am denying a vital part of this co-creative process. If I focus only on the health benefits that borage offers to humans such as its galacta-gogue properties, then I am not acknowledging the sym-poi-etic basis of rethinking natality for humans and non-humans.

As I embark on developing the plans of this sym-poi-etic natal gar-den I want to ensure that these plans include an entangled understand-ing of birthing bodies within this process. I return yet again to the phrase "on the wisp" and am striving to think with the complexity and legacy of straw. Re-engaging with the role that straw played in tethering birth to place, of people with place, is a reminder of a time when birth was an em-placed ecological event. More than this, it is the recognition of the co-cre-ative sym-poi-etic process at work during pregnancy and birth. In phase one of this project, the paradox of creating a natal garden with holobiont containers highlights the fractured relationship between birth and place, exemplified in the Western medical model of maternity care. This rupture of birth from place is further reinforced through the story of Leto who was forced to wander the land in search of an untethered location where she could birth. While recognising this rupture is vital in understanding birth as part of an ecological process, it is also imperative that raising awareness of this rupture does not become myopically focused on the implications for humans alone. To move beyond human exceptionalism is central to my vision for birth as part of an ecological process.

At this point in time human and non-human births are untethered from place. Haraway's assertion that she is a 'compostist' is a testament to a way of thinking outside of human-centric ideological frameworks. As I continue to make holobiont bowls to form the basis of the natal contain-er garden for phase one of this project, I am also thinking about the seeds that I will plant in these containers and where these containers will be located. One plant that I am extremely interested in thinking about is the dandelion. I have long been aware that dandelions are galactagogues for humans and other animals such as sheep, and that the taproot of the dan-delion plant acts as a natural fertilizer and improves soil structure. Planting dandelions in the holobiont bowls will presage the start of phase two of creating this natal garden. This planting will take place in Autumn and it is my intention to source a selection of places where the dandelion plants in holobiont bowls will be planted in the Spring. Thinking with dandelions will be the next phase of creating this symbiotic natal garden. While I have



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Planting borage in holobiont bowl in garden, straw pulp, soil, borage seeds, 2023 © Martina Hynan

drawn on the mythological figure of Leto to symbolize the forced rupture of birth from place, and am naming the container natal garden after her, I am now considering bringing Leto and Brigid together in phase two of this project. In Ireland, the figure of Brigid is deeply associated with fertility and birth and is also associated with dandelions.¹⁵ Brigid marks the beginning of Spring and she is celebrated on 1st February.

The dandelion is a galactagogue for humans and other animals, such as sheep, and the taproot of the dandelion acts as a natural fertilizer and improves soil structure. The transition from Leto's container garden to Brigid's emplaced garden is the challenge at hand. This planning process of a sym-poi-etic natal garden is proving to be a wonderfully enjoyable experience of bringing the human and non-human into a mutually nurturing configuration that reflects an expanded understanding of natality for a more-than-human world. Writing this article has helped me to refine the planning of a natal garden, I realised early in the process that it is necessary to make this a slow art project and to divide it into two phases so

that I can tease out the complexity of what it means to initiate a multispecies understanding of natality to inform the making of sympoietic garden capable of moving beyond inherited human centric natality towards an expansive entangled natality.

Endnotes

- [1] Arendt, Hannah. *The Human Condition*, (1958). I would also like to acknowledge the wonderfully helpful stimulating conversations that I took part in during the recent inaugural symposium of the Society for the Study of Pregnancy and Birth (SSPRB), on the theme of Natality: Interdisciplinary Approaches to Birth as Existential Experience <https://www.ssprb.org/symposia.html>
- [2] Barad, Karen, *Meeting the universe halfway: quantum physics and the entanglement of matter and meaning*, (Duke University Press: Durham & London 2007), 234.
- [3] Ibid, 151.
- [4] For more on Leto see: Foukara, Lavinia, "Leto as Mother: Representations of Leto with Apollo and Artemis in Attic Vase Painting of the Fifth Century B.C" in *Archäologischer Anzeiger*, (2017), 63-83, <https://doi.org/10.34780/574b-q767>.
- [5] I am aware that sympoietic gardening is something that others are engaged with, such as *The sympoiesis garden*, led by Eline De Clercq at the Royal Academy of Fine Arts Antwerp <https://forum-online.be/en/issues/oktober-2023/the-sympoiesis-garden> I have been in touch with Eline De Clercq and am hoping to visit this garden as I develop my own plans for a natal garden.
- [6] Donna J. Haraway. *Staying with the Trouble: Making Kin in the Chthulucene* (Duke University Press: Durham, 2016) 58.
- [7] Irish Farmers Association (IFA), „Straw Incorporation Measure” (2023) <https://www.ifa.ie/straw-incorporation-measure/>
- [8] Tufail T., Saeed F., Afzaal, M., Ul Ain, H.B., Gilani, S. A., Muzzamal, H., and Anjum, F. "Wheat Straw: A Natural Remedy against Different Maladies", *Food Science & Nutrition* (2021), 2335-344, DOI: 10.1002/fsn3.2030.
- [9] Gilbert, S. F. "Holobiont by Birth: multilineage individuals as the concretion of cooperative Processes", in *Arts of Living on a Damaged Planet*, eds. Tsing, A. S., Swanson, H., Gan, E., Bubandt, N. (University of Minnesota Press: Minneapolis), 2017), M81.
- [10] Ibid, M84.
- [11] Ibid, M81.
- [12] Puig de La Bellacasa M. P. *Matters of Care: Speculative Ethics in More Than Human Worlds*, (University of Minnesota Press: Minneapolis 2017), 170.
- [13] Donna J. Haraway, 97.
- [14] Ibid
- [15] For an introduction to Brigid's connection with Dandelions see: <https://thedruidscaldron.net/2022/01/25/brigids-beloved-dandelion/> I am also aware that Project Dandelion, which includes the former President of Ireland and United Nations High Commissioner for Human Rights, Mary Robinson among its founders, uses the dandelion as symbol of resilience in their climate justice campaigns <https://www.project-dandelion.com/>

Martina Hynan is an feminist artist researcher based in the West of Ireland. She is the first visual artist to complete a PhD with the Centre for Irish Studies, University of Galway. Her interdisciplinary research-led with art practice project contends that birth is an emplaced ecological process and event and proposes that birth be reframed within the more-than-human world. Her work sits at the intersection of Visual Culture, Feminist Environmental Humanities, Medical Humanities, and Irish Studies. She has worked as artist, curator and birth activist for many years and has taught visual culture at undergraduate and master's levels.

