

SEEING STONES AND
SPACES BEYOND THE
VALLEY

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Anything but Autonomy

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Prelude, or how to bite into this text

When it comes to concepts of autonomy, varied as they are, their historical legacy lies with significant difference – autonomy is that which separates the humanistic human, the so-called moral being, from other forms of life and non-living matter. I disagree with the way this hierarchy was drawn, how it continues to implicitly haunt the ways societies deal with environmental urgencies, or the legitimacy it gives to discrimination via the common sense it has become. After all, my thinking and practice form themselves through and with plants, who¹ have never been afforded our cherished “autonomy”.

And yet, they live – they thrive! – In impossible contexts and with intricate relationships science cannot even fathom. This text is as much a homage to their spectrality, to their contradictory and exuberant morphologies that have taught me to hold the multiplicity of being and relations in my thoughts all at once, as it is an invitation to the reader to consider autonomy differently. As a compulsion inhabiting the semantic space, which appreciates that in order to remedy some of the detrimental legacies of European Enlightenment, another metaphysic of self-governance, perhaps of self itself, must be practiced.² Dear reader, every chapter of this text is about that kind autonomy-never-named, that kind of muddled, morphing power-and-dependency across discourses, domains, and timescales, which is expressed relationally, through stories of material encounters with plants.

1. The Other libidinality

I had never grown peas until coronatimes. Aside from anxiety and cancelled events, the abrupt intervention of viral uncertainty afforded a three-month standstill during which I obsessively turned my attention to the potted plants in my apartment, that, true to their radicle being and strange wisdom, had lessons in store for me.

I was one of many to find vegetal companionship very gratifying and grounding during times of crisis, but the complicated affair had a history. About half a decade earlier I collaborated on an art project that considered what becomes of the deep

- 1 Spellcheck insists on the use of »which« instead of »who«, demonstrating how language enforces the boundary of subject.
- 2 This contribution presents experiences with other-than-humans, in which co-dependencies make it hard to discern expressions of autonomy or to compare autonomies between species.

space probes *Voyager 1* and *2* after they fulfill their tasks as scientific instruments.³ Low on nuclear power and with the terrestrial informational umbilical severed, they begin an unsupervised existence posited somewhere between space trash and post-human treasure. Space probes are technological progeny forever out of reach; the Voyagers will likely still be wandering the galaxy more or less intact in 5 billion years, when the Sun envelops its planetary bejewelment in a final glorious blaze. Seduced by the potent poetics of their deep time and deep space, I tapped into the trans-generational and trans-cultural longing for alien encounters. And as a trick of perception that the craving mind makes, I suddenly began to see green aliens everywhere – except they didn't have large almond eyes or long probing fingers. They were however mostly green. Plants are as peculiar and foreign as beings get, but unlike the space probes or exoplanetary life, I could sit with them.

About three years into my infatuation, I stood with them too. For 20 hours I stood before a 3 × 4 meter area of germinating cress, the pungent spicy sprouts that give taste to nourishing 'bio' sandwiches, in a performance called *Skotopoiesis*.⁴ The name is a Latin neologism that roughly translates to 'forged through shadow', referring to the yellowish human silhouette that gradually appeared on the cress field as both a scar from heady cross-kingdom communication as well as a testament to its possibility. I surrendered to the plants by surrendering to stillness, which, remarkably, didn't lead to the death of the animal. Instead, the experience gestured towards non-linguistic ways of knowing; trivial, liberating, and empowering. So while in my artistic practice I continued the perilous dance with technoscientific epistemes and grazed on new insights about plant intelligence coming from scientists like Monica Gagliano⁵ and Stefano Mancuso⁶, I also began viewing the mundane encounters I had with plants as politically and philosophically charged insight rather than demonstrations of other people's matters-of-fact. It's from the vapors of volatile organic compounds exuding from synthetic eco-chambers that I write this chapter to try to convey some vegetal acumen, which I don't have the words for.

In March, during the first wave of lockdowns, I hauled all the climbing plants I could find from the local garden store and positioned them amongst the rest of the 'Plants of Instagram'⁷ in our small living room. The exotic vegetation filling the space appears deceptively meek and conveniently silent, but to me they are my workforce, members of the vegetariat posse, my interspecies offspring, slow companions, tutors in aesthesis, and the fruit of reproductive labor.

3 Špela Petrič and Miha Turšič. "Vogayer/ 140 AU," 2013, produced by KSEVT. <https://www.spelapetric.org/#/voyager-nonhuman-agents/>

4 Špela Petrič, "Confronting Vegetal Otherness: Skotopoiesis," 2015, produced by Kapelica Gallery. <https://www.spelapetric.org/#/scotopoiesis/>

5 Monica Gagliano, *Thus Spoke the Plant: A Remarkable Journey of Groundbreaking Scientific Discoveries and Personal Encounters with Plants* (North Atlantic Books, 2018), 176.

6 Stefano Mancuso, "The Roots of Plant Intelligence," 2010, https://www.ted.com/talks/stefano_mancuso_the_roots_of_plant_intelligence.

7 I heard the term 'plants of Instagram' first mentioned by Sjoerd ter Borg during his artist talk about *Aesthetics of Exclusion: Botanica Variegata at Planet B Expeditions* (Waag, Amsterdam, 2019). In the work 'Vegetariat: Work Zero – Plants of Instagram Perform Ecosystem Services' I've appropriated it to refer to the particular aesthetic of indoor houseplants that are commonly sold in garden stores. <https://www.spelapetric.org/#/vegetariat-work-zero/>

The new additions to my indoor garden were several kinds of pea plants in plastic germination trays; a passionflower with its unearthly blooms opening and wilting in the span of a day; the forever thirsty hops; a type of asparagus with the softest, villous leaves attached to wickedly thorny stems. These were subjects of study for a new artwork aptly named 'PLAI'.

The work strives to create the conditions in which a plant and a machine animated by a self-learning algorithm could engage in ontological play. As observers, people would be privy to a game at the plants' pace whose rules would be defined by the vegetal and machinic players through their interaction. Over the forthcoming months the seed of an idea would develop through shared capacities of plants, programmers, and engineers, but the first step always involves close observation.

I set up the time-lapse camera and tended to it throughout the days and nights while the plants were climbing, winding, uncurling, and swaying in frenetic choreographies. For plants, growth is movement and movement is behavior. To this they add volatile secretions, electrical pulses, and color changes to communicate amongst each other, with pollinators, sap-suckers, and the predators of their predators.

The time-lapse capture of the pea movement was intriguing but anticipated. The technique reaches back to the advent of photography and later film, when the development of lens and time-based media facilitated new apprehensions of vegetal materiality as it augmented the scale of human attention. This glimpse into their excitability, responsiveness, inquisitiveness, and general liveliness allows for a unique attribution of animal-like agency to plants, since movement is the reference point of our zoocentric perceptual milieu. Viewed through machines that produce alternate spatio-temporal realities, the 'electric plant' is invariably enticing.⁸

But I did not expect that the peas would so effortlessly flower and, almost faster than they swayed, the flowers withered to expose a swelling pod. The change shocked and tickled the framing I had of these plants. I was focused so intently on movement-behaviour, that the expression of their sexuality and reproduction came completely unexpected, I imagine like a parent suddenly discovering a teenager living under their roof. The speed at which the transformation occurred – no more than two days passed from me noticing the legume flower to the appearance of the burgeoning mojito pea pod – threw into disarray the relational constellation I had created.

In a gesture that preceded rationalization, I knelt beside the window, arms resting on the windowsill, and leaned in. I opened my mouth and using lips as the fleshy feeding appendages they are, I proceeded to devour the snap pea directly off the plant. Joyful awe overcame me, as if tapping into some primordial ritual, perhaps a construct of my vivid imaginings of less urbanized encounters with plants. What strange magic underlies this bizarrely prosaic affect that burned itself into the repertoire of intimate plant teachings?

The cognitive dissonance triggered by eating peas directly off the growing plant compelled me. I gathered memories and recomposed the experiences from my plant-oriented artistic research that touch upon questions of power,

8 Oliver Gaycken, "The Secret Life of Plants: Visualizing Vegetative Movement, 1880-1903," *Null* 10, no. 1 (February 2012): 51-69, <https://doi.org/10.1080/17460654.2012.637392>.

dependency, intimacy, excess, (re)production, ingestion, and capture. These partial and particular examples from an ongoing process of being in and thinking through relations with plants precipitate into a series of materially and philosophically informed vignettes to offer nomadic glimpses⁹ into verdant encounters to remind the reader of their own vegetal vestiges.

2. The pea plants captured three times over

After accidentally discovering ornate patterns imprinted on the ground underneath a structure she'd left laying flat on the grass for a while, performance artist Kira O'Riley asked me whether I thought her enthusiasm over their coincidental allure somehow undermined the plight of the plants that had to struggle to produce the image. She knew I'd been thoroughly pondering this, but the answer I offered was a slippery non-reply, commending her for the question, as if the thought was enough. True, she expressed a sensitivity and attentiveness most people wouldn't. But the honest answer is – I didn't really know and I live with the discomfort that I likely never will.

Here's the rub – plants are *different*. Whether consciously or not, we frame and understand this difference following onto-epistemologies engrained in our cultural contexts. In the case of the continental philosophical tradition, which has historically had the most influence on modern science and technology, plants are seen as a simple form of life.¹⁰ The principle of hierarchical ordering introduced by Aristotle called *Scala naturae*, which created an immutable chain of being, was a habit incredibly difficult to shake, since it legitimized both natural and social exploitation and assured that power remained in the hands of rich white men. While we have culturally internalized humanist values such as individualism, autonomy, independence, and having a rational internal world from which subjecthood arises, plants have always been other to these constructions. We can observe this manifesting in language, when phrases such as “to vegetate” and “vegetable” are used to describe people during less-than-befitting inaction or in unconscious states. The fear of being treated as a plant haunts us insofar as they represent the plastic image of death, completely open to and dependent on the environment, devoid of the capacity to think, move or make decisions.

The reader might think that here I will offer a compilation of facts proving these assumptions wrong. But if that were so, I wouldn't be caught scrambling for an answer to the above predicament like a student who forgot to study. Plants arose

9 Nomadic glimpses here refer to the nomadic style of writing inspired by Rosi Braidotti (after Gilles Deleuze), summarised in her paper: “Writing as a nomadic subject” *Comparative Critical Studies* 11.2–3 (2014): 163–184, through which the stylistic choices of this article should be understood. Braidotti writes, “in terms of writing practices, the processes and flows of [nomadic] becoming, and the heightened states of perception and receptivity which they both assume and engender defy the canonical genre classifications and instal a sort of parallelism between the arts, sciences and conceptual thinking.”

10 Extensive analysis on this topic can be found in Michael Marder, “Vegetal Anti-Metaphysics: Learning from Plants,” *Continental Philosophy Review* 44, no. 4 (November 2011): 469–89, <https://doi.org/10.1007/s11007-011-9201-x> and further in Michael Marder, *Plant-Thinking: A Philosophy of Vegetal Life* (New York: Columbia University Press, 2013).

by solving evolution's challenges differently.¹¹ Their bodies are without a center, organized as a quasi-regular repetition of organs, each of which is non-essential. Upon an organ's death (root, stem, leaf), almost any part of the plant contains (pluripotent) stem cells that can regrow whichever faculty is needed. This capacity makes vegetative (asexual) reproduction not only possible but also probable, flinging the individuality of plants into complete disarray. How many individual plants are in a meadow? Grass may sprout from a single seed, but then it spreads rhizomatically, severing connections to some parts of its body and building new ones by grafting roots together. Plants don't speak using sound; they articulate through their whole bodies in material signification and spatial gestures resulting from growth. Organs of plant sexual reproduction have been associated with chastity, purity and romance, but their biological actuality renders mundane most deviant human fantasies of sexuality and communion.¹² Their bodies are simple, often flat, and sometimes translucent, lending themselves to close observation. And, obviously, they are rooted in place, driven to follow the light while their nether regions imbibe water, nutrients and toxins alike.

Since the focus of classical western cosmology is on identity rather than relationality, and that which makes us human is opposed to planthood, we are poorly equipped in moral or ontological intuitions with regards to plants.¹³ We could approach them through anthropomorphisation – the process of recognizing human-like properties in other beings, objects or phenomena – which seems to be a good evolutionary shorthand for connecting to the environment, but has recently fallen out of favor because of its inherent centering of the human. Alternatively, we could look to science for more insight on the inner and outer workings of plants. Nevertheless, science, following the hierarchical tradition of Aristotle, actually perpetuates the dualisms of individuation and finding matters of fact, rather than relationality and matters of care.

With colleagues Pei-Ying Lin, Dimitris Stamatis and Jasmina Weiss we tackled this double bind in the project 'Plant Sex Consultancy', a tongue-in-cheek exercise in plant-centered design that set out to make sex toys for plants.¹⁴ The cyclamen, pitcher plant and carnation were just some of the flowers whose reproduction we studied, referencing biological papers as well as writing speculative interviews with the plants. We first identified their area of interest or need. For example the cyclamen's evolutionary pollinating partner was a bee who had gone extinct. We then designed a titillating solution: the cyclamen's flowers could adorn a vibrator that would release the pollen during the visit of any bug, even if it didn't buzz at the lost-counterpart's frequency. Despite the concepts' intentionally suggestive nature, which played on reproductive normativity, we completely failed to address one of the tenets of sex – pleasure. Our repro-assisting devices as well as audience

11 For a wonderful encounter of plant capacities, see Daniel Chamovitz, *What a Plant Knows: A Field Guide to the Senses* (Oxford: Scientific American Books, 2012).

12 Monika Bakke, "Plant Research", in *Gender: Nature*, ed. Iris Van Der Tuin (Macmillan Interdisciplinary Handbooks, 2016), 117–33.

13 Michael Marder, "The Life of Plants and the Limits of Empathy," *Canadian Philosophical Review* 51, no. 2 (2012), 259–73.

14 Pei Ying Lin, Dimitrios Stamatis, and Špela Petrič, "PSX Consultancy," 2014, produced by MAO. <http://psx-consultancy.com/>

response, which often asked about their potential for biodiversity conservation, glaringly pointed at our collective ineptitude to imagine plant desire.

The pea plants on my windowsill are captured three times – in an epistemology, in the apartment and in my desire. Does it mean they are also ill fated?

3. You make it hard to have a good time¹⁵

The elephant in the room, or shall we say the oversized *Monstera* covertly making its way around the couch, is always the ‘question of ethics’. Put more bluntly: how do I reconcile the use of living organisms for non-essential purposes (= art) while I seem to be advocating the opposite (= love thy plants)?

I only started making art after a decade spent studying natural sciences, working in molecular biology labs, going to conferences, exchange programs, teaching, and of course publishing articles, patents, and theses. The detachment to the objects of study that I had to cultivate in order to follow scientific methodologies was astonishing, but absolutely necessary if I were to continue doing research in that context. Isabelle Stengers uses a poignant simile to describe this state of the scientist: that of a sleepwalker aptly trudging the ridge of the roof until they wake up and fall.¹⁶ She calls it ‘having the right stuff’, which also means sticking to the task at hand and not prodding in areas which could lead to uncomfortable realizations. The question of how I felt when decapitating newborn rats with a razor blade was one such dramatic no-no. But also, how to balance the (societal) value of the work we do, as a tiny, absolutely transparent droplet of a reagent would cost as much as my entire sustenance for 2 months. In science, the answer is always calculable: contributions of research to society are assessed, statistical equations provide the minimum number of casualties to achieve the required confidence in the results, while the really hairy questions are outsourced to ethical committees. All so that the researcher as subject can continue investigating the material as an object, with a clear distinction of agencies and intentions.

When I finally shifted disciplines in 2010, art had come a long way from its modernist roots. In 1936 plants were first shown as artworks in MOMA by photographer Edward Steichen, who cut the colossal delphiniums he had been growing in his garden and displayed them as objects of majestic but ephemeral beauty, which would decay over the 10 days of the exhibition. George Gessert worked with irises in the 70s and 80s, employing hybridisation techniques to modify the appearance of flowers and thus explored the role that human aesthetics play in breeding. And much like the former examples, Eduardo Kac, who coined the term ‘bioart’ in 1997, committed a decade of his work to various facets of life-as-manipulable object, where science and specifically biotechnology play a crucial role in framing it as such. Kac’s own writing builds upon the aura of the art-objects he creates, often appropriating organisms from scientific studies to create larger-than-life

15 Title borrowed from Domen Ograjenšek, “You Make It Hard to Have a Good Time,” *Šum*, no. 12 (2019): 1713–24, <http://sumrevija.si/en/domen-ograjensek-you-make-it-hard-to-have-a-good-time-sum12/>

16 Isabelle Stengers, *Another Science Is Possible: A Manifesto for Slow Science*, trans. Stephen Muecke (Cambridge: Polity Press, 2018), 35–36.

narratives.¹⁷ These would spark wide debate about definitions and affordances of art and biotechnology, such as the infamous fluorescent ‘GFP-bunny’ he had adopted, or ‘Edunia’, the petunia genetically engineered to express a protein of his. Despite its intended critique, the object-oriented desire behind art dealing with genetics, living organisms, or laboratories often still resonates with scientific doctrine insofar as it is reiterating the knowledgeable and targeted intervention into living beings and displaying the outcome as the living artifact of an artist’s wet medium manipulation.

The actuality of exhibiting the work, however, is quite different. Once the lights are on the creation, the artist steps back, but they are never far away. Behind the curtain is a flurry of activity, as demanding, time-consuming, and nerve-wracking as ever. While we often refer to the works as installations, what is actually taking place are durational performances of other-than-human organisms and humans trying to keep them alive. If anywhere, this is the locus that should pique our interest, since it much better reflects contemporary modes of production, digitization, and governance. Hybrid art of the 21st century earnestly engages in the processes of negotiation, intimacy, frustration, and discovery that liaisons with the technoscientific apparatus bring forth. In the path from object to process, from mastery to research, from medium to interdisciplinarity, hybrid art is insidious and is always already imbricated with the realm of the social, political, and commercial.¹⁸

I understand art-making as labor. My job is to generate that which cannot be achieved absent art’s prerogative to trespass institutional and conceptual boundaries. In contrast to other domains, artistic practice creates meaning even when it’s overtly discordant or morally ambiguous, because it is driven by the urgency to underscore the dilemmas inherent in relations with others, human and other than human alike.

4. I could eat you up

Anyone tending to plants will be familiar with the regular cycles of life and death; we sow new seeds of annuals each year and prune back perennials to invigorate them. We are delighted with the appearance of any edibles, without perceiving their ingestion as depriving offspring of a chance at vegetal life. We certainly don’t feel guilty when weeding the garden of herbal and animal pests to help the strawberries take up more sun.

The art project *Phytoteratology* was to be about new life, of cross-species becoming, of breaking boundaries.¹⁹ I employed tissue culture techniques to procreate thale cress embryos in artificial wombs, which supplied them the nutrients needed for development as well as hormones I had isolated from my own body. I called

17 Eduardo Kac, *Telepresence & Bio Art: Networking, Humans, Rabbits, & Robots* (Ann Arbor: The University of Michigan Press, 2005).

18 Janez Strehovec, “New Media Art as Research: Art-Making Beyond the Autonomy of Art and Aesthetics,” *Technoetic Arts* 6, no. 3 (2009): 233–50, https://doi.org/10.1386/tear.6.3.233_1.

19 Špela Petrič, “Confronting Vegetal Otherness: Phytoteratology,” 2016, produced by Kapelica Gallery. <https://www.spelapetric.org/#/phytoteratology/>

the organisms that emerged from these conditions *phytopolutans* or plant-human monsters, hinting at their aberrant conception. The conjunction was meant to juxtapose multiple semantic layers, from the logocentric twist on terms like *ectogenesis* and *embryo*, which here pertained to plants instead of animals, to the biosemiotic materiality of hormones, which in actuality transmit messages understood by both human and plant bodies.

Thale cress is a weed from the mustard family that grows on the edge of pavements and always goes unnoticed. It's about 20 cm high and has tiny four-petal white flowers, which self-pollinate immediately after opening. These develop siliques that carry around 20 seeds that mature over the span of a month, after which the plant releases them and dies. To start the process of so-called somatic embryogenesis, I would cut immature pods off the plant and proceed to remove the underdeveloped embryos.

The task was laborious and endless. The rows of 0.5 mm jelly-like babies furled in fetal positions had to be coaxed out from several skins using a syringe needle, tweezers and a microscope. To prevent them from getting infected with bacteria and fungi, I had to perform the procedure in a noisy flow cabinet that made my eyes burn. My body petrified for hours at a time, my hands would spasm and shake while I prodded the most vulnerable form of plant with pointed utensils. The duration, bodily affect, and unmistakable visuality of evisceration made me slip into a transfixed state.

The potent intrigue of molecular transgression held me like a spell. Like an ambiguous optical illusion you can will to see otherwise, the stuff at the end of the needle was switching from "embryo" to "just a weed", between "fetal abortion" and "conception of my mongrels". It was wildly uncomfortable and enigmatic.

5. Would the plant escape, if it could?

What frees photosynthetic beings from dependency on others' death is also an ontic constraint, which exigently frames them. On a sunny day a mature oak tree produces 4000 kilocalories worth of sugar, in contrast to an elephant of similar weight, who needs to consume over 10 times as much just to maintain their basal metabolism. The plants' chemical calculus doesn't allow for something as expensive as animal movement, but it's a mistake to think the oak doesn't have power over the squirrels that feed on its acorns. In oak trees mast seeding occurs every 10 years and is a coordinated over-production event, where excessive quantities of acorns over-satiate the frugivores so they spread but not consume the entire crop. The following year there is a bump in rodent numbers, but the acorns appear in normal range, which recursively controls their population. Similarly, clover starts producing rabbit contraceptive when the hare population overgrazes. Within 15 minutes of encounter with hungry antelopes, acacia trees communicate to fellow trees downwind that they should ramp up the production of toxic tannins. Orchids trick bees into thinking their inflorescence is a willing mating partner. Voodoo lilies

produce heat to spread the smell of rotting meat that attracts flies to their ripe spadix. The examples are endless.²⁰

I took care of over 20 generations of my capricious model plant. With each exhibition, the cultivation of phytopolutans became more difficult. I got a sinking feeling about growing the mother thale cress from seed, since battling thrips on impossible travelling schedules often meant I was making do with hardly any harvest. Though still mesmerized by the intimate encounters, I would flinch when I tore roots from plantlets as I was transferring them to a new medium. I hated how vulnerable the biotechnological protocol made them. I couldn't reason with myself to continue touring with the work. I stopped.

6. Vegetariat rising

The COVID-19 induced green rush that overwhelmed suppliers of plants reminded me of a short documentary I saw a while ago about the Palestine rooftop gardens.²¹ With her husband displaced since 1948 and her son serving a life sentence in an Israeli jail, Masyoona finds connection to her family and land by defiantly cultivating a garden on her small roof. The Aida refugee camp in the occupied West Bank where she has been forced to live for over 50 years has no space for trees or flowers, so the inhabitants sow where they can – inside old water tanks, buckets, trays and satellite dishes. There's much to be said about the resilience and self-sufficiency that sprouted in unbearable conditions, but I'm more struck by the way Masyoona sees the plants she cultivates as a lifeline to everything she had lost and a culture she is fighting to remember. She says, when you smell herbs on your rooftop, you remember the days in the past when our ancestors would farm their land.

The rise of indoor plant posts on social networks during the lockdowns shows people enjoy being surrounded by vegetation when movement in the open is limited, but the mode of consumption between the frugal Palestinian farmers and the #plantmamas is radically different. The former rely on traditional seeds and planters shared between neighbors, whereas Facebook 'plant exchange' groups flood with hints which garden store has just gotten a new batch of incredibly striking exotics. These fashionably styled potted rarities are either cultivated *en masse* or, when demand outstrips greenhouse supply, culled from the tropical forests in Indonesia, Thailand or Philippines. In the wake of the coronavirus pandemic, workers who lost their incomes began selling plants to make ends meet, often poaching them illegally from their habitats rich in biodiversity.²²

20 For an inversion of perspective in human - plant relationships in domestication see Michael Pollan, *The Botany of Desire: A Plant's-Eye View of the World* (New York: Random House, 2002).

21 aaz babe, "Palestine Rooftop Gardens," September 18, 2018, <https://www.youtube.com/watch?v=dG5P9C8skZA>.

22 Rebecca Ratcliffe, "Coronavirus Pandemic Fuelling Plant Poaching in Philippines" (The Guardian, September 14, 2020), <https://www.theguardian.com/world/2020/sep/14/coronavirus-pandemic-fuelling-plant-poaching-philippines>.

And yet, my error-prone, self-medicating, technology dependent, heteronomous screen-bound existence jibes better with the economies of scale of the exotic plant market than the vegetal solidarity seen in Palestine. When my financial credit scores are assessed to get a loan, if I wear a smartwatch that tallies my steps, cross the border by having my face scanned, send off a sample of my spit to learn my DNA ancestry, use Google Maps to show the quickest route, play Pokemon Go, or swipe a benefit card to rack up points, my person proliferates in the digital realm as innumerable proxies. While Shoshana Zuboff²³ dubs this informatic trace the behavioural surplus – the raw data immaterial, which is mined by governments and industry to create value – it also characterizes an acceleration of the transmutation of bodies into information. From the perspective of this new economo-biopolitic, our ontological opposite is no longer the plant, but the very idea of a self-determining human whose boundaries are delimited by the surface of the skin. In the eyes of algorithms, our cherished interiority is held in leaky vessels so that it appears as flat and superficial as the vegetable kingdom, a transparent object of tabulation. In the eyes of the algorithm, we are all plants.²⁴

Borrowing the term from Catriona Mortimer-Sandilands,²⁵ I refer to our human and other-than-human bodies – which are ontologically flattened and transfigured into digital proxies to, in return, be molded by the soft violence of preemption – as the vegetariat. The vegetariat exists in the conflation of production and reproduction, consumer and commodity, the concrete and its abstraction. But as I tackle the adversity of becoming-statistic in yet another disillusionment with humanist values, I also find myself in good company. The resilient and uncontainable verdant creatures show us how to thrive under the conditions where they have been denied capacities other than those that make them manipulable and useful within the monocultural bottom line of efficiency, accumulation, and progress.

My latest research is guided by precisely this – a desire to code for a future that builds upon the capacities of the vegetariat to engage in the pleasure and resilience of being together. ‘The Plant-Machine’ cautiously explores if and how it is possible to construct a technological entity that would think it is itself a plant. In this proposal, machine learning algorithms observe a community of plants equipped with various measuring devices that collect complex and interlinked data of their physiological processes. We are, however, not interested in their clarification, translation or a matrix of causes and effects. The goal of applying new computational methods such as inverse reinforcement learning²⁶ is to ask the concrete plants to approve the creation of their own particular digital twin, so the machine could tend to their vegetal lusts, aspirations and passions – whatever they might be.

23 Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (London: Profile Books, 2019), 704.

24 Through his analysis of biopower, author Jeffrey Nealon comes to a similar conclusion: “the vegetable ... (is an) image of thought that far better characterizes our biopolitical present than does the human-animal image of life, which remains tethered to the organism, the individual with its hidden life and its projected world.” Jeffrey T. Nealon, *Plant Theory: Biopower and Vegetable Life* (Stanford: Stanford University Press, 2016).

25 Catriona Sandilands, “Vegetate”, in *Veer Ecology: A Companion for Environmental Thinking*, ed. Jeffrey Jerome Cohen and Lowell Duckert (Minneapolis: University of Minnesota Press, 2017), 16–29.

26 Inverse reinforcement learning (IRL) is a recently developed machine-learning framework that can learn of an agent’s objectives, values, or rewards by observing its behavior.

We make use of computation to produce specific knowledge about the plant, which cannot be verified within the same epistemological frame (science), and therefore escapes its control. Should we succeed in breaking through the utilitarian hedonic calculus²⁷ to grow this plant-machine, there is also hope that algorithms won't remain the generalizing, subsuming utensils of governance and power that they today appear to be.

When my pink pedipalps gleefully tugged on the peapod's raw skin and I bit into a breathing body, portals to memories opened all at once. It was the nurturing excess of plants in general, and this pea in particular, that for that gleaming moment made me wish that I too someday be endowed with the ecstasy of becoming food.

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