# Sunlight as a Photosynthetic Information Technology: Becoming Plant in Tom Robbins's Jitterbug Perfume

Yogi Hale Hendlin

Tom Robbins's paean to plants *Jitterbug Perfume* tenders flora as the protagonists ushering out the waning animal age (represented by the evanescing Pan) to make way for the age of sunlight. The sharp and subtle tones of the plant world's aromas, Robbins encouragingly says, grow into catalysts for human evolution, permitting humans to enter into a halcyon Satya Yuga of plant-being.¹ One of the delights of this work of speculative fiction is that *Jitterbug Perfume* does not create an unbelievable world, instead interspersing the ravings of genius characters and slightly mythological spirits, places and happenings into the familiar surroundings of New Orleans, Paris and the ancient East. In Robbins's novel, characters from three cities become linked across millennia through a magical-realist narrative, whirling around the mysterious olfactory inducements of the red beet, the secret to the sublime base note in the perfect perfume.

Scent – the least attended to of the senses for the contemporary human organism – for many animals and kingdoms like *plantae* serves as a metonym for the invisible molecular trafficking network primary to their species-specific mode of signification. The world of a dog, or an acacia tree, orients through essential environmental signals in wafting experiences of volatile organic compounds that we might anthropocentrically name the faculty of smell. The fantastical journey of *Jitterbug Perfume* suffuses a believable speculative realism of plant consciousness through the double-edged vehicle of aroma, acknowledging that to enter the plurality and porosity of plant existence requires sacrificing the animal grip of muscle tension and the anxiety of the flesh for the chlorophyllous translation of light into life.

Indeed, perhaps because aromatic chemicals often work on us unconsciously, and often all too powerfully in the cases of pheromonal eros or disgust, smell in contemporary industrialised societies is cordoned off to a narrow range of socially acceptable, artificial masking compounds of car air fresheners and synthetic cleaning solvents. The full-bodied musk of fresh earth, of flowers and faeces, of petrichor and sweltering summer nights, resonate precariously with that part of us overflowing our sheltered humanism and connecting with the more than human world inside and around us.<sup>2</sup> The spontaneous mental and emotional states induced involuntarily through the nose disrupts much discipline and training, for better or worse, that otherwise constrain certain aspects of our sense awareness. Scent awakens slumbering instincts previously tidily tucked away in rectilinear rational orders. It makes us sensitive to how our environment impacts us viscerally, emotionally, and disrupts the clenched certainty of unbending resoluteness and fixed rationality. With its ability to unpredictably induce subaltern states and drives, scent is subversive.

In addition to physically yanking us out of abstraction into the material and mundane, scent often unannounced disabuses us of the comfort found proceeding along linear time orders. The arresting and expansive presence of smell can transport the imbiber from metric-regulated khronos into the elastic temporality of kairos, directly connecting the brain and its mischief with subtle long-wave frequencies reverberating harmonically with the local environment. Olfaction breathtakingly roots us in our body, the moment, and the surrounding sources of smell, breaking down the barriers between self and other in an imploding immediacy. Simultaneously, the kairos of aroma recalls and presages other moments, recompiling memories into new assemblages, delivering the smeller along a through line across time and space, connecting and integrating previously fragmented vignettes. Such scent-provoked awe propels Robbins's human protagonists Kudra and Alobar to hunt down the anchoring fragrance over centuries and continents that guides them back to each other in Jitterbug Perfume.

Jitterbug Perfume's distinctive rumination on the power of plants' scents, connected with unlocking previously scuttled instincts, provokes a rearrangement of Linnaean categories and the barricades of reason. Robbins's speculative fiction suggests that human olfactory instinct, especially those aspects that parallel our plant cousins' capabilities, supplies a form of intelligence more suited for the exigencies

of our zeitgeist. Dissolving the modernist divorce between emotion and reason, body and mind, the lesson from plants in Jitterbug Perfume indicates that the fear arising from the bodily separateness inherent to animals as individual membrane-bounded beings is overcome through connecting with our plurality as (metaphorical) photosynthetic beings to grow queerly, much like the rhizomatic and asymmetric growth of plants. Rather than hunkering down in the symmetrical and hierarchical ordering of our animal bodies, or more extreme yet, attempting to excise mind from body and seal our brains in digital vats, inhabiting the conceptual space of our plant self and body permits the expansion of the shut human fontanel to open to the light of the sun and reach our legs down into the fertile soil and moisture of connectedness.

I investigate how Robbins's novel illuminates what it means for humans to access our plant aspect. Intertwined with Michael Pollan's thesis in The Botany of Desire on plant agency reversing traditional anthropocentric causation, Jitterbug Perfume encourages a closer look at plant biology as well as what Michael Marder names phytophenomenology, accentuating the superficiality of plant-thinking as an unexpected strength that might also benefit human comportment.3 In valuing the immediacy of plant experience and the porosity of self and environment, the significance of smell as discussed by Nietzsche and Simmel hooks back into the morphogenesis of plants. Whereas other philosophers such as Kant or Freud see scent as dangerous, undermining uniquely human agency, Nietzsche and Simmel understand the rare affordances among the senses that scent presents for honing human intuitions beyond ordinary cultural filters. In entering into relations with plants by drinking in their smell, this inebriation enables humans to bypass the separation of self indicative of discrete animal bodies and empowered to grow-with the inter-species intelligence animating shared environments. Rife with humour – the lightness characteristic of plant being - Jitterbug Perfume simultaneously proffers a serious, compelling fantasy that chafes against the primacy of anthropocentric sensing for accessing and assimilating information.4

## Information Technology: A Plant's Point-of-View

Robbins's embrace of plant consciousness offers a refreshing future imaginary in contrast to contemporary digital dystopias of becoming gods over machines for that brief moment before they make slaves out of their makers. The coming age of plant consciousness the novel promises presents us with a fantastic evolution of non-domination, realising humanity's full capacities by tapping into the abundance of energy from the sun, an elemental pairing restoring our evolutionary radicles. Rather than a digital notion of infinite copies, a plant's unfurling is portrayed as an analogue process far from the totalitarian sameness of a standardised artificial intelligence. Jitterbug Perfume offers a utopian vision of the animal brain's potential when connected to its latent plant brain. As our human brains focus more on smell, the story goes, we unlock more memories and our capacity for memory, enabling immortal life through an olfactory sublime.

This next evolutionary stage for humanity heralds an age of the floral brain, for the story's wunderkind perfumer Marcel LeFever. He is a queer character indeed, epitomising this cosmology by declaring that 'flowers have a direct line to God that an evangelist would kill for'.5 LeFever's understanding of information technologies is thoroughly biological and coalescent compared to the mimetic and acquisitive variety fawned over in Silicon Valley. He expounds:

We live now in an information technology. Flowers have always lived in an information technology. Flowers gather information all day. At night, they process it. This is called photosynthesis. As our neocortex comes into full use, we too, will practice a kind of photosynthesis. (p. 321)

Transpositioning the scala naturae so that plant processes become aspirational and superior to current human abilities resonates with recent hotly contested discussions of 'plant neurobiology' amongst plant biologists. Plants' root system hormone auxin has controversially been compared as the plant analogue to human neurotransmitters, and plant roots to our human dendrites. 6 If plants have their own versions of brains, then what might plants know that we have yet to conceive?

A first step in overcoming anthropocentric notions of intelligence is to privilege the previously overlooked intelligence of other species, and allow that their particular manner of composition and mode of comportment, however strikingly different from our own, may not necessarily be inferior. <sup>7</sup> But the next step, which turns notions of "neural" upside-down', goes beyond the extensionist framework of intelligence

reliant on (the Vitruvian) Man as the impossible and abstract standard.8 The plant biologists František Baluška and Stefano Mancuso stress that 'we should be aware that any living unit equipped with complex sensory systems and organs is "constructing" its own world-view which might be radically different, but principally not better or worse, from our human-specific world views'. 9 In their estimation, the particular nervous system and brain structure that mammals employ are expressions of the fundamental neural capacities of all life from bacteria to plants. The adaptive behaviour and learning constitutive of even 'basic' single-celled organisms in deciding which items are food (or not), predators, and the like, suggest that neural structures can be composed in potentially infinite ways. The human brain, mighty as it is in creating, abstracting and hypostatising, then becomes but one model for achieving the functions it performs. In differing levels of complexity, 'brains' of all sorts permeate the bodies of organisms, often and probably necessarily indistinguishably, even if their decision-making parts look nothing like ours.

Terence McKenna once opined that 'animals are something invented by plants to move seeds around'. Such a perspective digests vestigial pretensions of hierarchy in the tree of life. The controversial claims in plant neurobiology that the 'neuro' aspect privy to animals (and especially humans) situated safely in the brains we all know and love (and can easily identify as brains) also extend analogously to the root systems of plants (including overlapping neurotransmitters between the two kingdoms), 10 is curiously inverted in perfumer Marcel LeFever's insights in Jitterbug Perfume. Rather than plants being incomplete animals, as Aristotle had it, animals are incomplete plants. 11 For LeFever, our brains are on the cusp of awakening our true plant nature, but this is only possible through overcoming our animal brutishness and embracing the floral potentials of our aromatically enhanced plant selves.

As glimmers indicative of this photosynthetic age, microbiologist Øjvind Moestrup has commented how the 'division between plants and animals is collapsing completely' as new 'hybrids' such as the newly discovered species Mesodinium chamaeleon that Moestrup helped classify are neither clearly animal nor plant, but contain elements from both kingdoms. 12 The vertiginous bewilderment of hybrid, plural beings, fractalises not just through biological discoveries, but ramifies throughout conceptual systems. Marder's methodology of 'weak thought' - the ability to philosophise diagonally without relying on the metaphysics of a steady and unbreakable gilded cage couched in a single author's conceptual system or final cosmology<sup>13</sup> - is indicative of the nature of plant-thinking. Weak thought, or il pensiero debole, resists the systematisation of thought into grand architectonic schemas. 14 Such lockdown systems perpetuate 'violence' through 'metaphysical impositions, which aim to submit everything to their own measures, standards, and agendas'. 15 Weak thought's progenitor Gianni Vattimo favours synthesising epistemic models, or what he calls a generative 'contamination of thought' (pensiero della contaminazione). 16 Weak thought proposes that the very recognition of our already ensconced and porously plural self lays the possibility for the emergence of a genuine subject.

This growing sense amongst plant biologists that plants inhabit a sentient space in their habitats, 17 making meaning of their surroundings through their unique sensory structures, is borne out in the central role in which beets organise time and space in Robbins's novel. The beet itself acts as a strange attractor guiding human action, rather like Michael Pollan's phenomenological treatment of plants cultivating humans to propagate them. 18 The tale of four plants in Pollan's Botany of Desire inverts subject-object relationships between plants and people to highlight the agency plants have in appealing to human desires and drives to lure us into doing their bidding. This Pollanian notion of plants commanding their own motivations and desires, following their own telos, intentions, and purposive action infuses Jitterbug Perfume's iterations of humans' own plant-like future. In a soliloguy, LeFever explains: 'There is also the possibility that all of what we call mental telepathy is olfactory. We don't read another's thoughts, we smell them' (p. 325). The central question Robbins poses then becomes: What are humans like when our primary encounter with the world and ourselves is, like a plant's, through smell?

Honouring other organisms' communicativeness – either human or nonhuman - entails fundamental shifts in method and approach. Pollan quotes the plant biologist Stefano Mancuso as affirming that 'a scientist needs to "love" his [sic] subject in order to do it justice'. 19 This is also a view held by Isabelle Stengers: part of ethically responsible and epistemologically accurate research involves 'shared suffering' with those organisms experimented with as co-investigators.<sup>20</sup> The objectifying lens of scientific inquiry is no longer taken to be uncontroversially acceptable when dealing within biological contexts, especially in ethological studies. Shared suffering reverses the objectifying 'view from nowhere' as Thomas Nagel disparagingly names the feigned numbness to one's feelings and the illusion that an observer could remove himself from a situation to spy on the workings of the universe from some disembodied and hence rational place. 21 The self-reflexivity of scientists interacting with living beings as beings aware of themselves as being interacted with, creates the beginnings for a new communicative biological paradigm, a verstehendes Erklären (understanding-based science).22

The vegetal other slowly erodes its ontological distance as Robbins's novel inducts us into understanding plant-thinking, which is plant being. The happy irony that becoming fully human means becoming more plantlike in our information age, not only ushers in a new respect for plant sentience and intelligence, but also permits the linear lineage of Western thinking to compost into the less burdened direct apperception of life through smell. This praise of direct experience, of plant experience, permits humans the opportunity to enter into the suspended states of time indicative of the great freedom and patience plants seem to demonstrate.

## Becoming Plant as Actualising Human Agency

Agency in Jitterbug Perfume is diffused from the wilful Western autonomous subject into the chemical reaction world of volatile organic compounds (VOCs). These allow plants to 'smell' their environment, learning information carried by the wind that aids their decisionmaking. Much as how plants communicate with each other through sending and receiving accidental and deliberate molecules through the air, scent intoxicates the human characters in Robbins's work. As the book's characters travel through dimensions and time, speeding up and slowing down much like the different timescales plants inhabit, they are guided not by their own wills but are carried by the waft of aromatic chemicals determining their behaviours. This transvaluation of automaticity and autonomy, valuing the 'lightening up' that characterises plant photosynthesis over the plodding pondering of human thought paralysis, becomes the event horizon of human evolution as we become more plant-like.

Wiggs Dannyboy, eccentric but ethical tycoon and founder of the Last Laugh Foundation, an organisation exploring immortality in Robbins's novel, understands aroma as a tool for evolution.<sup>23</sup> Rather than the 'bloody pendulum' of action and reaction which animal bodies and human society are bound up with (swinging between Classicism and Romanticism in art, conservativism and liberalism in politics), Wiggs yearns for the asymmetrical circumnutations of plant growth (p. 321). Tapping into smell for Wiggs is not a regression to some more primitive animal instinctual state but instead a leap forward that finally permits humans to bypass many of our fight-or-flight responses bound up in the olfactory triggers to our sympathetic nervous system. Wiggs attempts to explain his philanthropic rationale for getting into the perfume business to the Seattle waitress and perfumery protégée Priscilla:

'See here, Priscilla, I have an interest in smell. That is, I have an interest in the evolution o' consciousness. Smell is the only sense to communicate directly with the neocortex. It bypasses the thalamus and the other middlemen and goes direct. Smell is the language the brain speaks. Hunger, thirst, aggression, fear, lust: your brain interprets these urges with a vocabulary o' smell. The neocortex speaks this language, and if we can learn to speak it, why we may be able to manipulate the cortex through the nose."

'For what?'

'For expeditin' the evolution o' consciousness.'

'So's we can be happy and live a long, long time and not be bloody blowin' each other to bits.' (p. 244)

Reorienting the privileging of sight to that of smell in humans for Dannyboy also entails becoming more plantlike with our nose. The immediacy of molecular trafficking with our brains bypasses the prickly bits of cognition that get in the way of intuitive action. Delinking consciousness from thinking and mental brooding, Dannyboy understands the key to co-constitutive consciousness as a fundamental superficiality, the directness of plant existence.

Plant philosopher Michael Marder has argued that the superficiality of plants is not something to be derided, but reveals their hidden strength.<sup>24</sup> The agonising 'depth' of modern man, epitomised in the transition from Enlightenment to Romanticism, itself is a hall of mirrors. The fetishisation of interiority, which reached its apotheosis in Freud as an almost complete rejection of the body and escape into the limitless waters of the mind, is the opposite of plant consciousness, which comes without the debilitating hyperbolic doubt and navel-gazing artefacts of some varieties of (especially Western) thought.

The speculative realist elements of Robbins's concentration on the plant possibilities for human consciousness can be aided by the hermeneutic science of biosemiotics. The biosemiotic lens is crafted through pairing of Jakob von Uexküll's theoretical biology with Charles Sanders Peirce's semiotics, and asks the question how all types of organisms make meaning in their environments. By biosemiotically inquiring into the species-specific way plant sensory organs make meaning from the world they inhabit, Jitterbug Perfume can be read as imploring humans to take the next step in evolution not through accentuating commonly deemed attributes of human exceptionalism, but instead by moving beyond such linear evolutionary stories and branching into our phytosemiotic potentialities. 25 As Marder explains in *Plant-Thinking*, the philosophy of 'weak thought' envisions philosophical foundations and rigid systems giving way to the ebullient mycorrhizal varieties of pragmatic networked intelligence. The traditional dualism of the superficial and the deep falls away in thinking the plant, as plant being is plantthinking. Recognising how the world shows up differently to each species according to their placement and interpretation of reality as a species-specific *Umwelt* (environment) or sensory bubble requires letting go of stolid insistence on interiority - the individual narcissist's proverbial rabbit's hole without end. Instead, we can access our vegetal nature through scent, as it is accessed chemically rather than symbolically. In stripping away culturally laden armature, ironically, more meaning presents itself. This meaning simply was not accessible behind the barricade of symbolic suture. In giving up allegiances to the burrs of interpretation deforming our access to easy meaning, the information that was always in front of our faces floods forth in a wash of organismic unfurling.

Of course, part of arguing for redeeming the plain chemical aspects of scent is to acknowledge how the chemical and symbolic elements of olfaction cannot finally be separated, but instead reside in our viscera, recursive to the full impression of experience. Osmology, then,

remains an intersubjective science at the joint of molecular and individual states. The evolutionary alchemy of odours elicits geographically and culturally trained dispositions in the same way that durian fruit smells like heavenly bubblegum to some and flatulence to others.

The different elements of a triadic sign in semiotics – often crudely parsed into the identical or iconic aspect, the referential (denotative) or indexical aspect, and the representational (connotative) or symbolic aspect - have shifted weight patterns in modern times with the semiotic alienation from physical life through language and the mediations of human artifice.<sup>26</sup> Whereas previously the smell of mango could be had only by really encountering the fresh, bursting fruit, with distillation and then synthetisation technologies one can now find a dizzying pervasiveness of artificial mango smell in 'mango'-scented body scrubs, scratch-and-sniff stickers, air fresheners, cosmetics, artificial and natural flavourings and perfumes. This move from the smell of mango signalling a fruit at hand, to the smell (or its verisimilitude) becoming the vehicle for endowing otherwise bland products with a sort of exoticism, allure, lusciousness, pungent and tangy, and sweet quality, is precisely the 'semiotic drift' of overinterpretation which at its asymptote results in an implosive semiotic emptiness.<sup>27</sup> This limit case of the empty signifier would occur in a world populated by the simulacra of mango scent but in which every last mango tree had been killed by the effluent of capitalism.

Robbins's attention to plants as the carrier of non-symbolic confrontations with scent, provides a common rootstock connecting the novel's fantastic voyages into the esoteric practices of Taoist immortality. Alobar, along with later Kudra, are the unlikely protagonists in Robbins's epic which covers over a thousand years of history, a story that concludes, according to the book's jacket copy, precisely tonight at 9 p.m. A former pagan king who narrowly escaped death from an ancient European kingdom that ritually executed its leaders at the first signs of senescence (lest approaching decrepitude bode collective decline for the people), Alobar's name appears a possible portmanteau of 'cinnabar' - the vermilion mineral that apocryphally transubstantiates into gold - and 'alchemy', chemistry's precursor art of transformation to arrive at an elixir of life (his name also recalls the term 'a-lobar' - lacking separation of brain lobes).28 In his exile, he reaches India, where he finds Kudra, finally persuading her to leave the stake she's tied to, about to commit sati and die alongside her husband. Quickly proving to be the more worldly and clever of the pair, Kudra follows Alobar and they spend seven years in the caves of the immortal Bandaloops, soaking in the taoists' teachings of longevity and immortality through geo-aromatic osmosis.

Connecting with the teachings of the Bandaloops through meditations infused with the lingering scent of incense burned there long before, Alobar and Kudra romp through astral dimensions before moving on to Istanbul, where they must flee once their agelessness, proclivity for loud sex and mixed-sex bathing becomes noticed by medieval prudes. After losing their successful spice and perfume home business to village arsonists, they eventually move on to Paris, where coincidentally, Kudra's perfume shop in 1666 becomes the very location for the LeFever perfume family empire for centuries. It is at this spot that Kudra and Alobar's search for the perfect perfume base note causes them to part, and centuries later, to unexpectedly reunite.

Kudra and Alobar's mystical concoction, K23, emerges out of the lovers' separation, on their hunt for the perfect perfume base note. As the opening sentence of Jitterbug Perfume declares, 'The beet is the most intense of vegetables' (p. 1). It is this intensity of the beet and cinnabar, and Alobar as the living vessel for this alchemical transmutation, which brings forth the perfect perfume. From the beet-blood pulsing of the vegetal-human, the aromatic elixir to activate the photosynthesising consciousness of human potential is simultaneously a love potion and an olfactory trace, to foster recognition of kin across space and time. Kudra proposes to Alobar:

If we were marked by a unique scent, a fragrance all of our own, we could always identify each other, even if the light was not clear, even if our vision was clouded or our shapes physically altered; we could find each other no matter if we were lost in the rooms of Death. (p. 182)

In identifying their personal scent, Kudra recognises that 'smell needs no interpreter', as Diane Ackerman in her A Natural History of the Senses phrases it. 'The effect is immediate and undiluted by language, thought or translation', Ackerman concludes, and for Kudra, this extends beyond usual dimensional formalities as well.29

The base note of the perfume - beet pollen - strikes Alobar in an instant of satori during a meditation he shares with Kudra, though

instead of escaping the physical world as Kudra does, entering into the rooms of Death and Life, and observing the entire Tibetan Book of the Dead-inspired process, he is dragged back to earth and time by the musty beet pollen odour. This moment of revelation, as Alobar is 'knocked back' to earth by an 'overpowering odor' (p. 183), serves as the bifurcation point around which the entire novel turns. Alobar comes back to medieval Europe, forced to trudge through the centuries looking for his beloved, while Kudra's visit to the dimensions beyond life catapults her forward hundreds of years before her unlikely return to present-day Paris, coinciding magically with the arrival of Alobar, the LeFevers, V'lu, Priscilla, and the rest of the scent-hunting cadre. As Marcel LeFever will later echo in the book, 'Scent is the last sense to leave a dying person' and for Kudra this sense perhaps persists to some nagging degree beyond death (p. 283).

#### Nose as Instinctual Organ

In Anna Tsing's The Mushroom at the End of the World, a Japanese-American matsutake (Tricholoma matsutake) mushroom-hunter friend of the author explains how he finds his way to these subterranean mushrooms through sense and smell:

When one arrives in the spot, the memory washes over one, making every detail of that time come suddenly clear - the angle of a leaning tree, the smell of a resinous bush, the play of light, the texture of the soil. I have often experienced just that wash of memory. I am walking along what appears to be an unfamiliar stretch of forest, and suddenly the memory of finding a mushroom - just there - bathes my surroundings. Then I know exactly where to look, although finding is still as difficult as you can imagine.30

Strikingly, Tsing's description linking place, smell and memory resonates with Robbins's weaving of these three elements. The chiaroscuro of memory erupts from the confluence of geographical and olfactory grounding. Memory, then, exists in relation with, rather than estranged from, these filaments. Like a puppet, memories come and go according to the state of the organism. The strings of place and time, of

odour molecules and other elements, all tug at what pops out from the unconscious becoming present. The presence of so-called external sensory impressions stir the orientation and fruiting of so-called interior recollections

While humans are known to discriminate among several million distinct colours, the human capacity for fine-grained scent differentiation clocks in at well over a trillion distinct odour stimuli.31 The sensation of odour figures central to our primal interface with the world. As Florence Williams has pointed out, our species's ability to smell had been waning, evolutionarily. While in wild apes around 30 per cent of olfactory genes are non-functional, in humans, over half of our thousand-plus nasal receptor genes are inactive. 32 Williams postulates that our defunct nasal receptors are the consequence of the decreased evolutionary importance of olfaction for human survival, especially with the rise of sight as the dominant sense. Yet, as mentioned above, research amplifies smell as a direct line to the brain.<sup>33</sup> This uncanny sense bypasses much of the computing and conceptual gatekeeping of the mind and instead washes the brain in holistic, integrated impressions that defy rationalisable symbolic orders. Without the compartmentalisation resulting from the circuitous nerve pathways other senses run, nasal stimulation is direct and immediate.

Drawing on perfumery norms, the novel emphasises that choice perfume contains three distinct and harmonious elements: the base, heart, and top notes. Because scent cannot be quarantined, it is the interplay between these aspects that twizzles the nose. Robbins describes the perfect perfume, K23, thus:

Like a lobster with a pearl in its claw, the beet held the jasmine firmly, without crushing or obscuring it. Beet lifted jasmine, the way a bullnecked partner lifts a ballerina, and the pair came on stage on citron's fluty cue. As if jasmine were a collection of beautiful paintings, beet hung it in the galleries of the nose, insured it against fire or theft, threw a party to celebrate it. Citron mailed the invitations. (p. 189)

Robbins's vegetal acrobatics describing the relationships these three simple elements create together in the stirrings of their aromatic harmony hints at the impassioned complexities such pungently brewed perfumes can elicit.

Despite its potent allure, K23 is not exalted in the novel on the basis of its appealing aroma. In Robbins's tale, the power of the perfect perfume lies in anchoring and recalling memories that allow longevity and immortality. As Marcel LeFever proclaims in his presentation to the Last Laugh society, 'sight simply cannot compete with smell when it comes to the ability to awaken memory. Memories associated with scent are invariably more immediate and more vivid than those associated solely with visual imagery or sound' (p. 228). The unmediated chemical signal of scent bypasses cognitive processing prone to malfunction and error, directly sending the precise message to the awaiting receptors along the olfactory nerve. The spark of immediacy Robbins detects in scent keeps the smeller in the present moment, away from age-inducing thoughts drifting into past or future.

Olfaction defies quantifying and categorisation. Alain Corbin notes that 'Linnaeus, Haller, Lorry, and Virey in turn suggested lists of aromatic categories; none proved exhaustive. It rapidly became apparent that olfactory sensations could not be contained within the meshes of scientific language. '34 The slippery substance of odour elides pinning down the subjective experience of smell, which emerges as an interface between the wafting chemical and the attuned participant. The same airborne molecular compound conveys different meanings and even elicits divergent scents to the same nose across time and place.

Even Michael Edwards's well-known fragrance wheel, which attempts to pin down the geography of particular scents relative to their woody or citrus notes, fails to capture the enormity of smell: it is merely a shorthand tool for the fragrance industry trade. Despite the lucrative business of selling scent, the non-commercial aspirations for the perfect aromatic are perhaps most striking in *Jitterbug Perfume*. The primary noses all have spiritual aspirations for their preparation. Kudra and Alobar wish to create a distinctive but impalpable scent to help their friend Pan navigate in a sanitised Pasteurian world, as well as to fashion an olfactory anchor to waft each other back again during time-traveling. Scent thus can never exist as an objective sense; instead, as Kant indicated (despite his derision of the fact), smell is the most profound of subjective sense faculties.

Scent's subjective dimension and immediacy need not be a ground for demoting it. Georg Simmel's *Sociology of the Senses* proposes that the non-conceptual impressions sensory stimuli impart form both personal identity and our social self. In an early break from natural

and social-scientific dualism, Simmel contends that sociology should concern itself with the 'microscopic-molecular' aspects of impression, decisio, and thought-formation. This 'micro-sociology' would then, in Simmel's view, come to inhabit a subdiscipline in sociology, in Simmel's view. Simmel transposes the seemingly insignificant interaction of the social organism into constitutive elements of human (and more than human) sociability. Part of this analysis stems from Simmel's framework of viewing sociability as a force of its own, above and beyond the actors in the network of sociality based in its pure form as 'the free-playing interactive interdependence of individuals' without any 'ulterior end'.35

This emphasis on play as key to understanding the ontology of life and freedom, finds resonances in the magnum opus of Hans-Georg Gadamer, Truth and Method, as well as in Robbins's novel. For Gadamer, play is a 'mode of being' that defies the purposiveness of the willed agent while simultaneously honing an earnestness enthralled in the play at hand. 36 Like scent, play 'renews itself in constant repetition', and Gadamer claims it to be a substrateless activity.<sup>37</sup> The etheric uncanniness of scents riding on the invisible air, flitting in and out of our perception, often plays an underestimated role in the free action of human and other beings. Yet, this playful quality emerges from the proper disposition towards smell as a real-time mercurial activity distracting us from cramped anxieties about the past or future anticipations.

As smell is a major vehicle for relaying precognitive information that causes us to act, often in life-changing ways, Enlightenment thinkers have resented this sense often recalcitrant to the pure abstraction of ratiocination. For, as we have all experienced, there is nothing pure about scent; it is always a mélange, picking up both intended and lingering odours. The hazard of smell to Euclidean, Prussian or capitalist orders is that it acts as a force majeure, overriding the most rigorous institutional interests to control environments and subjects.

Robbins's world has none of this denigration of instinct, which his characters access through their own odours and the inebriating plant essences they incorporate into their beings. Throughout Jitterbug Perfume, intellection is seen as a barrier to the spiralled rationality that is recombinant with emotion, echoing Schiller's Nietzschean declaration that 'it takes more than a day or a generation to undo the cumulative blunders of 2000 years of Intellectualism'.38 Repeatedly Claude LeFever, the businessman in the family, exclaims to his brother Marcel, 'I would never have allowed LeFever to insure your nose for a million francs were I not convinced of its infallibility ... Your snout will solve the puzzle even if your intellect should not' (p. 13). In becoming attuned to one's surroundings on a non-mediated level through the directness of scent, the labyrinth of the mind and the accompanying layered (and often mistaken) judgements are revealed to be hindrances as much as help.

### Smelling the Sublime

Whether frangipani, jasmine, sandalwood or rose otto, aromatic tones, like their musical counterparts, accomplish much in transporting us from whatever pain and suffering we may be sitting in. The renaissance of aromatherapy is testament to the importance of plant smells as a gateway to nature we cannot live peacefully without. The dizzying array of extraction methods for scents also stirs distinct nuances and overtones into out-of-the-way crevices of our being. Though the nineteenth century soon would bring synthetic compounds, giving us the obnoxiously shrill perfumes found today, plant-based perfumes have been used by humans since our very beginning.

Through reintegrating smell into our ontological repertoire, we reclaim our vulnerability to the environment not as a danger, but as a cord to the past and future that does not require tying up our cerebral cortex with calculations, doubts and worries. The plant-human chimera that we already always have been, according to Robbins, permits bypassing in many instances the reptilian part of our brain that holds on to ideologies and fears precipitating violent conflict and overreactions.

Of course, a refined sense of smell has not always historically been used for cultivation. Just as readily, differences of bodily odour have been used as a trope for the uncleanliness of certain races to justify their oppression. Jay Geller describes Walter Benjamin as attempting to 'rescue smell and mimesis from their anti-Semitic identifications and release their redemptive possibilities'. 39 His study of the role of aromatics in Benjamin's writings conjures various instances in which the odour of a people is a stand-in for wider prejudices. The charge of giving off a stench is perhaps the most grievous social faux pas one can passively make. For Freud, 'smell and smell-related terms signify the gravest offenses to the social contract."40

'Elevated above the earth and plants', Kant writes, 'it is no longer smell that dominates, but rather the eye.'41 Thus the faculty of smell connects us with the earth and plants; as long as we remain vulnerable to smell, tethered to the outside world, we remain earthbound, plant-like. Kant describes smell as 'taste at a distance': but even this distance is 'insufficient mediation' against evocating pulsing mémoire involontaire that act upon the body and psyche, rendering the subject porous and penetrable. 42 It is precisely '[b] ecause it is taste at a distance' that 'smell actually comes closer to us than taste, into the lungs, even if it is farther from the (now indeterminate) object-source', Jeffrey Librett notes. 43 Penetrating to the fathoms, for Kant 'smell is contrary to freedom' as choice and control fall away to enmeshment and mixture with one's environment, immersed in a sensuous heteronomy rather than pure autonomy.44

Kant's fear of smell, and of being affected by outer circumstances, is precisely the Enlightenment misconception that transcendence from the bodily, both the environmental and earthly, provides the keys to freedom. Such a conception of freedom becomes predicated on one's ability to rip oneself from context, rather than to accept as a plant inevitably must, the literal thrownness (in the Heideggerian sense) of a being born into a milieu, willy-nilly, without necessarily deciding such a destiny entirely for oneself. The transcendent as identified with a god removed from entanglements, rather than understanding god as the entanglements themselves, obliges Enlightenment thinking to privilege mobile, unattached, worldly, aloof and unhinged qualities over accepting interdependence, rootedness and implication as unavoidable ontological foundations for our and perhaps all existence.

The captivating force of olfaction works in both directions according to the Heideggerian notion of capture (Benommen). It both distances one from assertions of experiential ownership, and it also transports beyond the limitations of our circumscribed reality and limited prioritisation. The lack of self-ownership smell embarrassingly reveals for Kant, in smell's ability to alter our moods as well as attune our thoughts and perceptions to intensely wished-for or unexpected environmental encounters, lays bare the porosity of body, extending into the environment. In the same vein as Kant's depreciation of scent, for Freud, olfactory experience is foremost in constituting a rejection of our humanness (which he characterised by sight), and a descent into our animality and sexuality, in addition to those murky things which

grab hold of us through preconscious olfaction but never become consciously noted.45

Freud's concentration on musky smells, from the perspective of phytoaromatics, is misplaced. For Robbins's Marcel LeFever, Wiggs Dannyboy, Kudra and Alobar, the saps and distils of plants are not meant to cover up, but to transmute through the admixture of plant unquent and human. A perfume is not, like plastic surgery, meant to obscure some sort of vestal failing, but instead aromatics intertwine with the very ontogeny of the anointed. The phyto-remedy serves as an epigenetic sluice to titillate dormant potentialities in our only semifathomed DNA.

Perhaps no philosopher has valued the instinctual wisdom attached to odours like Friedrich Nietzsche. An aromatic physiognomist, Nietzsche diagnoses disease - corporeal and conceptual - through the smell of a thing. As western culture has shunned the animal and plant sides of ourselves, valuing instead whatever we have conjured to count as exclusively human, or worse, as gods temporarily embarrassed with our bodies, our semiotic capacities too have been shunted. Nietzsche speaks of books as experienced not just as read, but also through 'imbibing their odor'.46

Yet, it is not at all clear that Nietzsche has made peace with smell. In On the Genealogy of Morals he write: 'Whoever still has a nose to smell with as well as eyes and ears, can detect almost everywhere he goes these days something like the air of a madhouse and hospital."47 Promising and moral boundedness (or is it moribund-ness?) carries with it its origins through the 'odour of blood and torture'. Kant's categorical imperative likewise 'smells of cruelty' for Nietzsche. 48 The smells inhabiting Nietzsche's world are normally those of rotting flesh (e.g., 'I have to smell the entrails of some ill-constituted soul!'49) rather than the fluorescent luminescence of live or distilled plant material.

One of the rare instances in which Nietzsche lauds an aroma is in connection to plant material. He writes that when the human is made out of a plant, carved from a tree, in this instance, the crooked timber of humanity that Kant so deplored as hopeless, overcomes these fleshly limits. It is through connecting to that plantlike aspect of ourselves, that for Nietzsche someone can 'turn out well'.

That a well-turned-out person pleases our senses, that he is carved from wood that is hard, delicate, and at the same time smells good. He has a taste only for what is good for him; his pleasure, his delight ceases where the measure of what is good for him is transgressed. He guesses what remedies avail against what is harmful; he exploits bad accidents to his advantage; what does not kill him makes him stronger.50

Smelling good, the metric Nietzsche uses to determine the soundness of an organism, argument or phenomena, then seems to be connected with the type of thing out of which it is made. Rotting flesh smells bad; fresh, vigorous wood imparts genuine nobility.

Meat is eaten; the age of animals is also that of eating animals, of eating and being eaten. Plants, on the other hand, do not necessarily need to be killed to be eaten, nor eaten to be ingested. The leaves of a tree, or the leaves of a lettuce can be plucked without doing real damage to the plant (same with fruiting mushroom bodies of subterranean fungi). It is through imbibing plant consciousness in various ways that immortality is achieved, according both to Robbins's characters and many indigenous cosmologies. Eaten, drunk, fermented, inhaled, smoked, topically: plants offer a delight for every orifice. Like the thousand-year-old puerh tea bushes in Yunnan Province, China, through the ageing and mellowing of time, the rough tannins of personality and resistance are worn away, enabling the true ferment (firmament) of the essence of the plant-person to shine through. The wisdom of the aged plant confers on the human the rhizomatic perspective.

At the beginning of Nietzsche's chapter 'Why I am so Wise' in Ecce Homo, he demonstrates his true value by claiming unique cultivation of his olfactory sense: 'I have a subtler sense of smell for the signs of ascent and decline than any other human being before me.'51 Perhaps it is the goaty odour of that animalistic quality in humans which disturbs him into writing, which he notes as a constant distraction from other forms of perception and intellection. Nietzsche never resolves the annoyance of animal odours through the sublime promise of plant perfumes that Robbins conjures. Instead, Nietzsche remains suspicious of the scents he perceives, even as he esteems the olfactory faculty.

The ambiguity of smell, providing access to the divine as well as the hellish, never calls for erasure, however, in Robbins's adventure. In erasing smells, memory can also be erased. Scraping away the scent of a long-aged home, many a hermit may feel completely out of place. Deodorisers do not just cover up existing scents, but also cover

up personal histories, connections to past memories embedded in the rebroadcast acquisition of odour stimuli. The regime of covering up with brash chemicals, rather than converting the foul to fair through the transubstantiation of taking in the body of a plant, presents a lacquer of salubriousness under which mephitic abandon festers.

Through the religious quality of perfume, anointing oneself with the holy aroma of the perfect perfume (with the perfect beet base note), one becomes transubstantiated. From the millenarian fantastic insights of Marcel LeFever to the utopian mission of Wiggs, the quest for transscent-dance through surrender to the immortal scent magnetises all who learn of it. Beyond being an art, perfumery for Robbins's cast carries a viscous, ambiguous religiosity, forever teetering on heretical.

#### Conclusion

As the infrangible plurality of plants bursts forth from our human consciousness, the hoarding individuality of the age of the animal human skips forward, lightening up the dense red-in-tooth-and-claw zero-sum game of reptile-brain politics. Robbins's vision of humanity's future is not a technological one of artificial intelligence, but a biocultural remembering of the always already present information channels abandoned by the civilisations Gandhi so eyebrow-raisingly mistrusted.<sup>52</sup> The information encoded in the light of the sun, the mycorrhizal murmurings among plant roots permeating the undersoils of ecosystems, the memory stored in the molecular structure of water particles - these are the sensitivities awaiting our growing attunement to the vegetal world. Much like Nagel's famous question, considering what it is like to be a plant, or rather the vegetal phenomenology of attempting to inhabit vegetal consciousness as a human, allows the unfolding of the petals of peace humanity so deeply craves.

This refreshing turn of trope Robbins offers, not of a technological utopia but of a vegetalista receiving power and knowledge directly from the plants and ultimately their source of knowledge, the sun, propels the journey of Jitterbug Perfume off the rails of playbook fiction into the spiritual domain of magical realism.<sup>53</sup> The current realist turn in philosophy, with all of its speculative varieties, might benefit from the biological variety of magical realism, which paradoxically stays grounded in the natural processes of life and death rather than taking

flight into the supernatural. Returning to the Greek and Persian root of the word (magos, magush), magic is keenly connected to the ability to experience and accomplish, which comes from ardent learning of the natural world, hands submersed in soil. Visceral connection to nature opens up our ability to find wonder and guidance. Becoming an instrument of a higher power, in this case the sun, humans follow plants in doing the sun's bidding, getting out of their own preconceived way.

Human evolution, differentiating increasingly towards the light of plant consciousness, isn't a return to some primitive past, but entails expanding consciousness into the stillness of knowing that comes unmediated, without priests or politicians. It is a shedding of rustedout armour, a recovery from collective industrially triggered anosmia, rather than a retreat. Robbins's vision for the future eschewing mechanistic or even digital fantasies of artificial intelligence (based of course on the mammalian human mode), instead spins plant consciousness to network isolated humans to other organisms serendipitously, while reclaiming instinct as not merely an animalistic sense, but concordant with the deep wisdom of plants - a hitherto unrecognised and undervalued form of plant knowing. Robbins's intercession transcends Western fetishisation of the symbolic (our forte!) and understands that plant consciousness offers a more immediate, less emotionally loaded access to the hexagonal refractions of reason. Reclaiming instinct and reason together, unified in the vegetal being available to us, exhales the animal burden of chronic time, efflorescing the present progressive to release rather than gather tense.

#### Notes

- The Satya Yuga, or Golden Age, in Hindu and Vedic mythology, is the highest era of the four, in which no striving or sacrifices are necessary for attainment, similar to Plato's 'perfect year' in the Timaeus. Each of the four ages - the Satya (Golden), Treta (Silver), Dwapara (Bronze) and Kali (Iron) - corresponds to a change in celestial alignments. According to Sri Yukteswar's 1894 The Holy Science, which revised traditional understandings of the duration of each Yuga, each age lasts 2,700 years, with a 300-year 'transition' period between one period and the next.
- 2. See David Abram, The Spell of the Sensuous (New York: Vintage Books,
- Michael Marder, Plant-Thinking: A Philosophy of Vegetal Life (New York: Columbia University Press, 2013).

- 4. While as organisms, we are endowed with certain capabilities and limitations, the emphasis of Western culture since modernism on the visual, on the individual and on separation unique both geographically and temporally (Joseph Henrich, Steven Heine and Ara Norenzayan, 'The Weirdest People in the World?', Behavioural and Brain Sciences, 33/2–3 (2010), 61–83) is precisely what plant-becoming softens and transmogrifies (Marder, Plant-Thinking).
- Tom Robbins, Jitterbug Perfume (New York: Bantam Books, 1984),
  p. 321. Subsequent references to this edition of the novel will be given in brackets in the text. The novel is also available as Jitterbug Perfume (Harpenden: No Exit Press, 2001).
- See A. Alpi and others, 'Plant Neurobiology: No Brain, no Gain?', Trends in Plant Science, 12/4 (2007), pp. 135-6; František Baluška, Stefano Mancuso and Dieter Volkmann (eds), Communication in Plants: Neuronal Aspects of Plant Life (New York: Springer, 2006); E. D. Brenner and others, 'Plant Neurobiology: An Integrated View of Plant Signaling', Trends in Plant Science, 11/8 (2006), 413-19; Anthony Trewavas, Plant Behaviour and Intelligence (Oxford: Oxford University Press, 2014).
- 7. Michael Marder and Yogi Hendlin, 'Communication', in Michael Marder (ed.), *Grafts: Writings on Plants* (Minneapolis: University of Minnesota Press, 2016), pp. 93–6.
- 8. František Baluška and Stefano Mancuso, 'Deep Evolutionary Origins of Neurobiology: Turning the Essence of "Neural" Upside-Down', *Communicative & Integrative Biology*, 2/1 (2009), 60–5, p. 60.
- 9. Baluška and Mancuso, 'Deep Evolutionary Origins', 61.
- 10. Brenner and others, 'Plant Neurobiology'.
- 11. Compare with Marder, Plant-Thinking.
- 12. Michael Marshall, 'Unique Life Form is Half Plant, Half Animal', Zoologger, 13 January 2012, https://www.newscientist.com/article/dn21353-zoologger-unique-life-form-is-half-plant-half-animal (retrieved 5 December 2017).
- 13. This is very similar to what political theorist Hannah Arendt referred to as 'thinking without a banister' (Hannah Arendt, 'Hannah Arendt on Hannah Arendt', in Hannah Arendt, *Thinking Without a Banister: Essays in Understanding, 1953–1975*, ed. Jerome Kohn (New York: Schocken Books, 2018), pp. 443–75, p. 473.
- 14. Gianni Vattimo and Pier Aldo Rovatti (eds), Weak Thought, trans. Peter Carravetta (Albany: State University of New York Press, 2013).
- 15. Vattimo quoted in Marder, *Plant-Thinking*, p. xii.

- 16. Gianni Vattimo, The End of Modernity: Nihilism and Hermeneutics in Post-Modern Culture, trans. Jon R. Snyder (Cambridge: Polity Press, 1988)
- 17. Baluška and others, Communication in Plants; Monica Gagliano, Stefano Mancuso and Daniel Robert, 'Towards Understanding Plant Bioacoustics, Trends in Plant Science, 17/6 (2012), 323–5; Monica Gagliano and others, 'Out of Sight but Not out of Mind: Alternative Means of Communication in Plants', PLOS ONE, 7/5 (2012), e37382.
- 18. Michael Pollan, The Botany of Desire: A Plant's-Eye View of the World (New York: Random House, 2002).
- 19. Michael Pollan, 'The Intelligent Plant', The New Yorker, 15 December 2013, http://www.newyorker.com/magazine/2013/12/23/the-intelligentplant (retrieved 5 December 2017).
- 20. Isabelle Stengers, Cosmopolitics I, trans. Robert Bononno (Minneapolis: University of Minnesota Press, 2010).
- 21. Thomas Nagel, The View from Nowhere (New York: Oxford University Press. 1986).
- 22. The so-called Verstehen-Erklären debates in Germany in the 1960s and 1970s are the forerunners of the Anglophone science wars. The hard sciences sought to explain the world, while the humanities and social sciences sought to understand it. Biology, however, requires both. One critique in this debate, is that the natural sciences sought explanation (Erklären) without understanding (Verstehen). For more on the Verstehen/Erklären controversy, see Karl-Otto Apel, Die Erklären: Verstehen-Kontroverse in transzendentalpragmatischer Sicht (Frankfurt: Suhrkamp, 1979).
- 23. Perhaps Dannyboy's Last Laugh Foundation puts new meaning in Ralph Waldo Emerson's delightful image that 'earth laughs in flowers'.
- 24. Marder, Plant-Thinking.
- 25. Yogi Hale Hendlin, 'Multiplicity and Welt', Sign Systems Studies, 44/94 (2016), 94-110.
- 26. Yogi Hale Hendlin, 'I Am a Fake Loop: The Effects of Advertising-Based Artificial Selection', Biosemiotics, 12/1 (2018), 131-56.
- 27. Umberto Eco, Interpretation and Overinterpretation (Cambridge: Cambridge University Press 1992); Tyler Bennett, 'The Semiotic Life Cycle and The Symbolic Species', Sign Systems Studies, 43/4 (2015), 446-66.
- 28. Quizzically, Alobar Holoprosencephaly is a birth defect where there is no separation between the left and the right halves of the brain. While

from an ableist perspective this is a deformity, from a plant perspective this union of left and right halves, the physical flight from separation, carries other evolutionary connotations. Since Robbins's story begins with Alobar as a fertility king for a people with a strong collective consciousness and little individuality, the lack of bicameralism in Alobar's namesake defect may hint at the queer asymmetries of the plant world.

- 29. Diane Ackerman, A Natural History of the Senses (1990) (New York: Vintage Books, 1991), p. 11.
- 30. Anna L. Tsing, Mushroom at the End of the World (Princeton: Princeton University Press, 2015), p. 244.
- 31. C. Bushdid and others, 'Humans Can Discriminate More than 1 Trillion Olfactory Stimuli', Science, 343/6177 (2014), pp. 1370-2.
- 32. Florence Williams, The Nature Fix: Why Nature Makes us Happier, Healthier, and More Creative (New York: W. W. Norton & Company, 2017), p. 73.
- 33. Ackerman, A Natural History.
- 34. Alain Corbin, The Foul and the Fragrant: Odor and the French Social Imagination (Cambridge, MA: Harvard University Press, 1988), p. 111.
- 35. Georg Simmel, Simmel on Culture: Selected Writings, ed. David Frisby and Mike Featherstone (Thousand Oaks, CA: Sage Publications, 1997), p. 9.
- 36. Hans-Georg Gadamer, Truth and Method, second revised edn, trans. Joel Weinsheimer and Donald G. Marshall (London: Continuum, 2004), p. 102.
- 37. Gadamer, Truth and Method, p. 104.
- 38. Ferdinand Canning Scott Schiller, Studies in Humanism: The Definition of Pragmatism and Humanism, second edn (New York: Macmillan Press, 1912), p. ix.
- 39. Jay Geller, 'The Aromatics of Jewish Difference; or, Benjamin's Allegory of Aura', in Jonathan Boyarin and Daniel Boyarin (eds), Jews and Other Differences: The New Jewish Cultural Studies (Minneapolis: University of Minnesota Press, 1997), pp. 203-56, p. 205.
- 40. Geller, 'The Aromatics', p. 225.
- 41. Immanuel Kant, Anthropology, History, and Education, ed. Günter Zöller and Robert B. Louden, trans. Mary Gregor (Cambridge: Cambridge University Press, 2007), p. 128.
- 42. Kant, Anthropology, p. 269.
- 43. Jeffrey Librett, 'Aesthetics in Deconstruction: Derrida's Reception of Kant's Critique of Judgment', Philosophical Forum, 43/3 (2012), 327-44, p. 341.

- 44. Kant, Anthropology, p. 269.
- 45. Sigmund Freud. Civilization and Its Discontents, trans. James Strachev (New York: W. W. Norton & Company, 1962).
- 46. Friedrich Nietzsche, Untimely Meditations, ed. Daniel Breazeale, trans. R. J. Hollingdale (Boston: Cambridge University Press, 1983), p. 19.
- 47. Friedrich Nietzsche, On The Genealogy of Morality, ed. Keith Ansell-Pearson, trans. Carol Diethe (Cambridge: Cambridge University Press, 2006), p. 89.
- 48. Friedrich Nietzsche, On the Genealogy of Morals and Ecce Homo, ed. Walter Kaufmann, trans. Walter Kaufmann and R. J. Hollingdale, reissue edn (New York: Vintage, 1989), p. 65.
- 49. Nietzsche, On the Genealogy of Morals, p. 44.
- 50. Nietzsche, On the Genealogy of Morals, p. 224.
- 51. Nietzsche, On the Genealogy of Morals, p. 222.
- 52. Gandhi's famous response to a Western reporter, inquiring what he thought about Western civilisation: 'I think it would be a good idea.'
- 53. The term vegetalista in the Amazon refers to a shaman who predominantly draws her or his power from the healing and (de) stabilising effects of administering plants (rather than other forms of spiritual medicine, such as song).