# Towards a Philosophic Appraisal of Plants: Their Metaphysical and Moral Significance



### **ABSTRACT**

Plants pose an intriguing challenge to philosophy, both in terms of ontology and ethics. They occupy a zone of affinity with other animals and human beings, but they are radically alien to these other forms of life. So taking metaphysical account of the vegetal kingdom is, to say the least, a tricky endeavour. Nonetheless, I will attempt to do just that, providing an ontological explanation of botanical beings' quasi-worlded status. Moreover, I shall mount a campaign to canvass plants' place in the moral order. We will see that they have a proto-considerability when it comes to illuminating their ethical standing. This means that their interests count for more than the non-considerable properties of stones but can be outstripped by those of other animals. In what follows the range of matters treated is wide, as befits the breadth of vegetal philosophy.

### **KEYWORDS**

Metaphysical status, moral standing, botanical ontology, worldhood, plant ethics



# **ETAPHYSICS**

Botanical beings present a challenge to philosophic thought. In the first place, this challenge is felt in the arena of metaphysics: What do plants amount to ontologically speaking? Plant proponents are wont to sing the glories of the vegetal, emphasising the ways in which these organisms perform a variety of wonderfully complex

feats (electro-chemical communication, information processing, an intricate kind of perception, motion-in-place, and even emotion and telepathy). Plant sceptics, on the other hand, insist that the proponents are zoomorphising the beings under consideration, or worse, anthropomorphising them – either way, there is an ontological category mistake being made. Some of these sceptics are so keen to minimise plant performance that they risk a category mistake of their own at the other end of the bodily spectrum – i.e. they appear to 'lithomorphise' plants as merely inert objects. It will be the task of the present essay to steer

a plausible course between these two tendencies in the emergent field of botanical philosophy – to recognise, that is, the truly impressive feats of plants without resorting to hyperbole, and, on that basis, to fix the metaphysical and moral status of their being and value.

Over thirty years ago, I made a first stab at the ontology of life in general and of plants in particular. My postulate was that 'life is the possession of worldhood - that is, having an orientation with regard to being-at-large'. Plants, specifically, manifest dwelling in their environments or *Umwelten* – they can be said to live in an orientational world, in other words.<sup>2</sup> Animals develop habitat into territory by locomoting within or ranging across a zone of habitual residence, and this is a demarcation of their kingdom-specific sort of environmental lifeworld.<sup>3</sup> What do plants and animals have in common that is not shared with rocks and machines? Almost 40 years ago, Paul Taylor answered this question as follows: The former are 'teleological centers of life', whereas the latter are not. 4 'All [and only] organisms, whether conscious or not', Taylor explained, 'are teleological centers of life [TCL], in the sense that each is a unified, coherently ordered system of goal-oriented activities that has a constant tendency to protect and maintain the organism's existence'.5 TCL's are 'identifiable individuals' or 'unique "personalities" that/who have a good of their own (specified by their inherent teleology).6 Another thinker applies the concept botanically: 'A plant has a directional goal, a purpose, which is to maintain or perpetuate its existence." It is important to recognise that, when it comes to plants, Taylor's organismic ontology is limited yet sufficiently strong for the metaphysics of nature at hand - 'that a particular tree is a [TCL] does

- 1 R.R. Acampora, 'Human and non-human lifeworlds', Environmental and Architectural Phenomenology 3 (2) (1992): 10.
- 2 Ibid.
- 3 Ibid.
- 4 P. Taylor, *Respect for Nature: A Theory of Environmental Ethics* (Princeton: Princeton University Press, 1986), pp. 119–129.
- 5 Ibid., p. 122.
- 6 Ibid., p. 120.
- 7 M. Hall, 'Plant autonomy and human-plant ethics', *Environmental Ethics* **31** (2) (2009): 169–181, 174. See also A. Arber, who writes in an Aristotelian register of plants' final and formal explanations the former referring to extrinsic directionality and the latter to intrinsic purposefulness; *The Natural Philosophy of Plant Form* (1950; facsimile ed. Darien: Hafner, 1970), pp. 204–205.

not entail that it is intentionally aiming at preserving its existence, that it is exerting efforts to avoid death, or that it even cares whether it lives or dies'; still it carries a behavioral orientation organised by a biologically constituted good of its own.<sup>8</sup>

Now, in light of the accounts given above, we can ask a question that some will dismiss out of hand, and even those disposed to take it seriously will consider daring – viz.: Can there be a plant phenomenology? Here again it may be helpful to consult Taylor for his organismic ontology is associated with a certain outlook with regard to natural creatures, namely, that we should study them with objectivity and wholeness of vision. This means we ought to be neutral (not anthropocentric) and strive for complete coverage of a creature's character. It should be noted at this point that such a perspective is achievable beyond the horizons of the animal kingdom – botanical beings, that is to say, can too be understood through the twin lenses of neutrality and full observation. Through means of this sort, we gain purchase on plant perspectives – which are present even though there may be little to no (first-person) subjectivity to take or have them. The perspective is generated by the TCL, and it can run independently of any consciousness (or lack thereof). When we peer into these perspectives, we are phenomenologically privileged to witness (in the third person) an, as it were, anonymous vitality. It is important not to understate the significance of this achievement, for true students of plant phenomenology, it can be said in Taylor's voice, 'have reached the most complete realization, cognitively and imaginatively, of what it is to be that particular individual. We have let the reality of another's life enter the world of our own consciousness. We know it as fully and intensely as it can be known.'10 Indeed, some go even further, and contend that plants are 'subjects of their own lives'; I would allow that vegetal life forms are TCL's but yet reject the ascription of subjectivity or selfhood to them.

Taylor left the definition of TCL somewhat hazy, so let me try to clarify the concept before moving on. First, the teleology alluded to is rooted in having DNA (i.e., an organic program). Second, the centre

<sup>8</sup> Arber, The Natural Philosophy of Plant Form, p. 122

<sup>9</sup> Ibid., pp. 125–126.

<sup>10</sup> Taylor, p. 128. Italics in the original.

<sup>11</sup> Hall, 'Plant autonomy', 181.

denoted is a sensate locus of vitality that registers environmental conditions and responds to them.<sup>12</sup> Third, the notion of life at stake is that of an organism, which is to say a somaesthetic node or nexus (originating in nature so far, though artificial forms may now be synthesised).

Some sceptics deny outright that there are plant perspectives and thus are also given to question or even disavow the attribution of mental properties to botanical beings. On the other hand, there are some plant proponents who appear to go too far in their attempt to build a case for vegetal mentality. Hall, for instance, writes of plant intelligence that there is environmental awareness and even intentionality and choice in the botanical realm.<sup>13</sup> 'Buried within contemporary plant science literature is', he claims, 'a growing awareness that plant behavior has many of the hallmarks of mentality'. 14 This kind of position had already been staked out early in the twentieth century. Clifford Farr, for example, talked of the psychology of plants and attributed to them emotions such as disgust and temper, rationality in conducting arithmetic and volition. 15 Likewise, Ada Yerkes spoke of mind in plants, and attributed to them intelligence in reproduction and propagation, as well as neurobiological analogues in their organelles, and implied a vegetal dreaming in 'sleep motion'. 16 The late twentieth century saw the publication of Peter Tompkins and Christopher Bird's The Secret Life of Plants (1973), in which fairly flamboyant claims were made about the emotional states of plants and even their telepathic communication across species lines. Nowadays there is a new breed of plant proponents who rigorously take up the challenge of scepticism on this front – at stake, for example with biologist Monica Gagliano, are practices of botanical interface through plant-writing and vegetal visions.<sup>17</sup>

- 12 Cf. Stella Sandford, *Vegetal Sex: Philosophy of Plants* (London: Bloomsbury Academic, 2022): 'To be alive is to be a biological system that adapts to [environmental] problems' (p. 24).
- 13 M. Hall, Plants as Persons: A Philosophical Botany (New York: State University of New York Press, 2011), pp. 144, 146.
- 14 Ibid., p. 12.
- 15 'The psychology of plants', The Atlantic, 1922, 780–781, 783.
- 16 'Mind in plants', The Atlantic, 1914, 634, 637, 642.
- 17 M. Gagliano, *Thus Spoke the Plant: A Remarkable Journey of Groundbreaking Scientific Discoveries and Personal Encounters with Plants* (Berkeley: North Atlantic Books, 2018). Cf. the notion of botanical 'conversation' in J.C. Ryan, P. Vieira

Let us now delineate a direction in which philosophical botany could fruitfully go. In his magisterial survey of organismic ontology, Charles Wolfe opines that we find the essence of life where we have a sense that there is 'somebody home', and I would comment that this is as good a place to start as any. 18 To build on this intuition, we may refer to the eminent Estonian theoretical biologist Jakob von Uexküll's concept of the *Umwelt* of an organism: Beyond its literal meaning of environment, this term is used to designate a lifeworld shaped by speciated spheres of sensation, constituted, that is, by different modes of perception – and all kinds of organisms have their distinctive variety of *Umwelt* (including plants, according to some later followers of Uexküll). 19 For recent commentator Corrollo, the key here is to jettison the idea of interpretive subject from the thought of Umwelt, and work instead with the notion of a communicative organism at the heart of any given lifeworld.<sup>20</sup> Arguably, this conceptual move unlocks worldhood in moving from the animal to the plant kingdom - there is thus the possibility of non-zoocentric forms of interiority. Uexküll himself did not go in this direction, primarily if not exclusively absorbed as he was in zoology. He did allow that plants occupy a so-called 'dwelling shell' (or Wohnhülle),21 a concession that would presumably put them on par with hermit crabs (a paradigmatic species in this respect). Here we see, as we did earlier, the importance of habitat to the contours of organismic (including botanical) worldhood.

Maybe nobody has approached the question of plant worlding with fresher eyes than anthropologist Natasha Myers, who has proffered an excellent ethnography of 'becoming with and alongside plants'.<sup>22</sup> She speculates that their electro-chemical transduction of signals might be a 'responsive molecular affectivity [that is] the most basic

and M. Gagliono, *The Mind of Plants: Narratives of Vegetal Intelligence* (Santa Fe: Synergistic Press, 2021), p. 169.

<sup>18</sup> C.T. Wolfe, 'Do organisms have an ontological status?', *History and Philosophy of Life Sciences* **32** (2–3) (2010): 195–232, at 210.

<sup>19</sup> F. Corrollo, 'A foray into the worlds of plants and fungi', *Biosemiotica* **17** (2024): 469–485, p. 472.

<sup>20</sup> Ibid., 477.

<sup>21</sup> Ibid., 481.

<sup>22</sup> N. Myers, 'Conversations on plant sensing: Notes from the field', *NatureCulture* **3** (2015): 35–66, at 37.

kind of "feeling", which would entitle us to attribute sensitivity/sensibility to plants without any warranted fear of anthropomorphism.<sup>23</sup> What is so enlivening about Myers' work is the way she wrestles with the somaesthetic sphere of interactivity among different species. In this regard she follows the footsteps of an elder existentialist, namely Martin Buber. Here are some essential excerpts from Buber's account of a particularly pluripotent human-tree encounter:

It can ... come about ... that in considering the tree I become bound up in relation to it. The tree is now no longer It [rather Thou/You]. Everything belonging to the tree is in this: its form and structure, its colours and chemical composition, its intercourse with the elements and with the stars, are all present in a single whole. The tree is no impression, no play of my imagination, no value depending on my mood; but it is bodied over against me [Es konfrontiert mich leibhaftig] and has to do with me, as I with it — only in a different way. Let no attempt be made to sap the strength from the meaning of the relation: relation is mutual  $^{24}$ 

Here we have an eloquent evocation of the somatic mediation of inter-species (plant-human) relationship. Moving forward, we would do well to remember it as a touchstone for theorising.

Further, Frederick C. Lubbe and Kenny G. Castillo Alfonzo report that plants are perceived to be biologically animate, because they are alive and move (albeit in place); on the other hand, there is the perception that they are inanimate because their movements are so slow and different from locomoting animals such as ourselves.<sup>25</sup> As for this latter

- 23 Ibid., 48. Cf. also biologist Richard Karban's *Plant Sensing and Communication* (2015), esp. chap. 2 ('Plant sensory capabilities') and theorist Paco Calvo's 'The philosophy of plant neurobiology: A manifesto', *Synthese* **193** (5) (May 2016): 1323–1343 (esp. 1326–1329).
- Trans. R.G. Smith, as quoted in M. Popova, 'Philosopher Martin Buber on learning to look at trees teaches us to see each other more clearly', https://www.themarginalian.org/2018/09/11/martin-buber-tree/. Italics in the original. Boldface added. For balance, notice that Buber's phenomenology remains agnostic about any mentality or spirituality in the plant at stake: He explicitly denies experience of arboreal consciousness and says, in a Husserlian tone, that 'I encounter no soul or dryad of the tree, but the tree itself' (Ibid.).
- 25 F.C. Lubbe and K.G.C. Alfonzo, 'Plantness, animalness, and humanness: Plant placement within animacy and adjacent scales', *Journal for Theory of Social Behavior* 54 (2) (2024): 136–166, at 141.

observation, it is important to point out that the advent of time-lapse videography has helped to enhance our perception of botanical motion – plants appear indeed sessile to us, but on a slower timeframe they actually move in many ways: writhing, twisting, squirming, wriggling, etc. When it comes to assessing intentionality and agency, the former property is defined by Lubbe and Alfonzo as 'the ability to perceive and act upon the environment', while of the latter it is said that a being is agential when 'it is self-defined as an individual, produces its own activity in the environment, and regulates itself and its activity along certain norms'. The two authors conclude on a sceptical note – namely, that putative experience and sentience in plants are black boxes that we cannot penetrate with the epistemic tools available to us. <sup>27</sup>

We are coming, as it were, full circle back to the scepticism reviewed above. But the shape of our journey is more like a spiral, because the latest loop twists the scepcis into new ideas. For instance, no less an authority than Edmund Husserl expresses doubts about botanical experience: Trans-specific phenomenology 'does not go so far that definite interpretation of the plant as animate organism has become possible'. 28 Yet, this scepticism is tempered by bringing other factors into the scene: We should 'not exclude plants' having sensitivities ... [however] we would be incapable of recognizing them, because there is lacking any bridge of empathy and of mediately determined analysis'. 29 This stance, taking a position astride epistemological doubt and ontological allowance, is echoed in Thomas Nagel's celebrated work on alterity of consciousness. 30 There the author grants that there is something it is like to be a bat, but denies that we could know or have cognitive access to such an alien interiority.

Even the negative part of this judgment can be mitigated, by returning to Husserl for clues going forward – namely, he mentions a 'bridge of empathy' and 'mediately determined analysis'. Now, two scholars have found, elsewhere in Husserl's own corpus, 'a three-step procedure

- 26 Lubbe and Alfonzo, 'Plantness, animalness, and humanness', 16.
- 27 Ibid., 17.
- Quoted in J.M. Garrido, 'Husserl's somatology and life sciences', *Philosophy Today* **56** (3) (Fall 2012): 295–308, at 296.
- 29 Ibid. Italics added.
- 30 T. Nagel, 'What is it like to be a bat?', *The Philosophical Review* **83** (4) (October 1974): 435–450.

for operationalizing the native (empathic) perception of another living being [--] the three steps include: eidetic self-modification, intercorporeal pairing, and appresentation of an alien field of experience'. 31 The first step involves exercises of the imagination to alter one's sense of self; the second is equivalent to bodily resonance or the somatic sympathy/symbiosis ('symphysis') that I have discussed elsewhere;<sup>32</sup> the third brings about a 'bio-phenomenological recognition' of 'elementary subjectivity' in the alien animate organism.33 The result of taking these steps is three-fold: First, we can gain 'essential insight into what it is like to have a Leib for every living being (plants included)';34 second, symphysical connection emerges in that 'my own Leibkörper enables me, by drawing behavioural parallels between my body and the encountered entity, to perceive the latter as another *Leibkörper*';<sup>35</sup> third, it becomes the case that 'I attribute inner life (a distinct primordial sphere of lived experience) to the alien body. <sup>36</sup> Tying these steps together, then, Gaitsch and Vörös reach the conclusion that an inter-species bridge of empathy and mediately determined analysis can be built and employed into the realm of vegetal life forms. Thus, we come to access a common corporality with other organisms, one that can be shared even with plants.<sup>37</sup> According to Garrido, this means that – contra Uexküll's theory of separate sensate bubbles – we partake in 'the same world'.38

Now, not everyone is convinced about the viability of empathy to establish bridges into the botanical realm. Michael Marder, for instance, has composed a withering deconstruction of its efficacy in this respect.<sup>39</sup> He argues that there is an ontological mistake at work: Empathy is the

- 31 P. Gaitsch and S. Vörös, 'Husserl's somatology reconsidered: *Leib* as a methodological guide for the explication of (plant) life', *The Horizons of Embodiment*, aka *Phainomena* 25 (98–99) (November 2016): 203–226, at 205.
- 32 R. Acampora, *Corporal Compassion: Animal Ethics and Philosophy of Body* (Pittsburgh: University of Pittsburgh Press, 2006): chap. 2.
- 33 Gaitsch and Vörös, 'Husserl's somatology reconsidered', 221.
- 34 Ibid., 212. Italics in the original.
- 35 Ibid., 216.
- 36 Ibid., 221.
- 37 Garrido, 'Husserl's somatology and life sciences', 295.
- 38 Ibid., 298. Cf. his paradoxical claim that the worldhood of different organisms is 'incommensurable' (299).
- 39 M. Marder, 'The life of plants and the limits of empathy', *Dialogue* **51** (2) (2012): 259–273.

ability to literally share another being's psychic interiority, but plants lack such (or at least do not have an affectively penetrable psyche). <sup>40</sup> Suggesting that empathic feelings towards plants end up being projections of the empathising self (and consequently get caught in the epistemological distortions of metaphysical narcissism), Marder concludes that 'empathy ... needs to be non-dialectically overcome'. <sup>41</sup> This counterweight to anthropomorphic affectivity provides a salutary service to the plant theorist, weaning him/her off of philosophically lazy forms of psychic projection. That said, however, I think it is yet possible to meet Marder's challenge and overcome the distortions of misplaced empathy: by focusing on *Leib* (live body), we can generate a cross-species experience and acknowledgment of being-with plants – not on a plane of psychic interiority but rather on one of somatic vitality (see below, in morality section).

What then are plants, between the poles of dour scepticism and extravagant promotion? Hall begins by arguing that, since they run their own existence and maintain their own integrity, they are autonomous beings. 42 He goes on to assert that 'plants are intentional, intelligent agents', because they are self-organising, perceptive and adaptive. 43 Due to their sophisticated electro-chemical information processing, I think the claim of intelligence withstands scrutiny. I counter the notion of volitional agency in botanical beings, however, because I believe it goes beyond the evidence available. Now, one theorist who stretches the concept of mentality to fit vegetal life is Chauncy Maher. He argues that plants are autopoietic and adaptive, and therefore are 'minded' beings given an enactive philosophy of mind. 44 'Enactivism says that all living things are autopoietic systems, and that such systems have at least a minimal form of mind. For they disclose (or "enact") an environment, an "umwelt," an array of things with significance. 45 This kind of biosophy

<sup>40</sup> Ibid., 262f.

<sup>41</sup> Ibid., 271.

<sup>42</sup> Hall, 'Plant autonomy', 172; see also 173, where he explains that the phenotypic plasticity of plants allows them to change form in adaptation to their environments.

<sup>43</sup> Ibid., 176.

<sup>44</sup> C. Maher, *Plant Minds: A Philosophical Defense* (New York: Taylor & Francis, 2017), pp. 115, 70, 73.

<sup>45</sup> Ibid., 124. Cf. 74, where it is said that 'enactivism implies that for any organism, there is at least a proto-feel to its encounters with things'.

is plausible, though I think that it gets us only to botanical 'minds' (not minds in the usual sense of conceptual representations, interior language and suchlike phenomena). A similar outlook is brought forth by Hanna Rosin and Zoë Schlanger: their idea is that plants manifest a quasipersonality (in that they evince distinctive variations of behaviour) and display proto-subjectivity (in that they are closer, ontologically, to animals than to minerals). Others who take a balanced view of botanical ontology include Angela Kallhoff, who asserts that 'even though we do not know what it is like to be a plant, it might [yet] matter to a single plant whether or not it flourishes'. The idea here is that the absence of epistemic access to a plant's internal being does not necessarily mean, ontologically, that it cannot have a certain sort of self-regard – namely, an Aristotelian tendency to care for its own welfare (not psychologically, of course, but rather as a matter of vegetal vitality).

It is important to contextualise this view of botanical ontology, focused on individual organisms' capabilities, with an appreciation for the environmental element in the life of plants. Emanuele Coccia, for instance, makes the claim that *Dasein* (being in the world) essentially is immersion. <sup>48</sup> The Spanish language allows us to bring forth the subtlety and power of this point, for in it we can say that *ser* (to be) equals *estar* (to be situated). In this outlook, organism and its surroundings are in constant dialogue and exchange – as Coccia puts it, 'for there to be immersion, subject and environment have to *actively penetrate each other*'. <sup>49</sup> Plants are special exemplars of this doctrine, because of their rooted

- 46 Z. Schlanger, interview by H. Rosin, 'If plants could talk', Radio Atlantic, 2 May 2024. Cf. proponent James Brindle's bolder position that botanical organisms are fully worlded entities: 'Plants sense and respond to a world which they experience, a world of their own making and ... there is ... a kind of self [in plants], however abstruse and unlike our own'. Ways of Being: Animals, Plants, Machines (New York: Farrar, Straus, and Giroux, 2022), p. 67.
- 47 A. Kallhoff, 'The flourishing of plants', in A. Kallhoff, M. Die Paola and M. Schörgenhumer (eds), *Plant Ethics: Concepts and Applications* (New York: Taylor & Francis, 2018), pp. 51–58, at p. 55. Cf. S. Pouteau: 'Plants cannot be pushed back to the unvoiced or unformed material world'. S. Pouteau 'Beyond "second animals": Making sense of plant ethics', *Journal of Agricultural and Environmental Ethics* 27 (1) (2014): 1–25, at 22.
- 48 E. Coccia, *The Life of Plants: A Metaphysics of Mixture* (Cambridge: Polity Press, 2019), pp. 31, 34.
- 49 Ibid., p. 37. Italics in original.

nature and photosynthetic properties. Moreover, we should not forget the worldly nature of their existence: "to be" means, for them, to *make world [fair monde]*'. <sup>50</sup> So, too, should we remember that plants help circulate different gases – and, thereby, become one with a global breath of the biosphere. <sup>51</sup> There is indeed a metaphysics of the atmosphere undergirded by plants: as Coccia asserts, 'to be in the world means always to share not only an identity, but the same [botanical] *breath*'. <sup>52</sup> Thus we gain purchase on a holistic philosophy of nature that valourises mixture or compenetration and is mediated by plants' presence and organic functions.

It is also possible to mount a placial ontology of plants, which has been the project of phenomenologist Ed Casey.<sup>53</sup> He holds that plants do not just occupy space (in the sense of taking up geometric room) but also constitute place (in the phenomeno-hermeneutic sense of bearing significance). The latter is more than a geographic location; it is also laden with meaning (derived from the TCL of the plant). Casey argues that place dynamises, sustains and consolidates plants – and that we can appreciate this by turning our attention to plants' burrowing of earth, downward tunneling (in their root system), upward movement (growth into atmosphere) and outward unfolding (with their leafy spread). Ultimately, this phenomenologist is concerned to highlight the temporality of plants as events (rather than things) – they are happenings caught up in the process(es) of vitality. There is much to be gained from Casey's work on philosophical botany, but his picture of the field is overly benign – we need to admit, beyond his emphasis on the gentle aspects, the place of parasitism and carnivory among plants. Not all vegetal life is kind - to the contrary, some is outright violent. We should accept this darker side as equally real.

We have come to a point in our metaphysical meditations where it would make sense to put forward my own views on some of the central issues in philosophy. First, there is the problem of plant minds: Can they be said to think or have consciousness? I do not believe plants

<sup>50</sup> Ibid., p. 38. Italics in the original.

<sup>51</sup> Ibid., p. 36.

<sup>52</sup> Ibid., p. 52.

<sup>53</sup> E. Casey, 'Phenomenology of the vegetal', webinar in *Plant Voices* series run by the Kerulos Center, 26 Apr.2024.

are minded in the usual sense of that term (which implies, essentially, robust rationality and interior language).<sup>54</sup> However, I could go so far as to entertain Maher's thesis of plant 'minds' in his alternative, enactive sense (which implies, essentially, autopoietic and adaptive properties). Relatedly, there is the puzzle of vegetal experience: Is there anything it is like to be a plant? It should come as no surprise that a fair, even-handed answer calls for some subtlety – and so I want to say there is something it is kind (or sort) of like to be a plant. Botanical beings do not harbour a high-level form of consciousness (as opposed to animals, including humans), but it is not the case that they lack interiority altogether (as opposed to rocks).<sup>55</sup> Plants manifest simple internal states and semiagential behaviour in the way that they express themselves in postures (which can be seen with the naked eye) and in gestures (which usually require time-lapse photography or videography to observe).<sup>56</sup> We should also remember that plants may be said to have perspectives or standpoints that can be sketched in the third person even if they are not articulated in the first. This stance of mine must muster defenses against both sceptics and proponents. A straightforward example of the former is Michael Tye, who is sure that the inner events/states of plants are not phenomenal and thus concludes that 'there is nothing it is like to be a Venus Fly Trap or a Morning Glory'. 57 Yet, it is not overly speculative to surmise that plants may host quasi-qualia (e.g., ur-feelings of vitality). Of course, this does not entitle us to the excesses of some promotional rhetoric. Taken literally, conjectures about emotion/telepathy transcend acceptable evidence and stretch our ordinary concepts of thinking and communication (which necessitate mental representations) beyond their essential limits. Thus, we see that a balanced appraisal of plant

- 54 Cf. Francis Darwin, who opined that 'we must believe that in plants there exists a faint copy of what we know as consciousness in ourselves'. Quoted in Maher, *Plant Minds*, p. 15.
- 55 Cf. Pouteau, who asserts that we have to get at 'what it is *to be* alive in the absence of a brain and a central nervous system'. 'Beyond "second animals" 10.
- 56 Cf. botanist Stefano Mancuso's assertion that it is 'our tendency to equate behavior with mobility' that prevents us from seeing rooted plants as 'behaving'. Quoted in N.P. Baker, 'The intelligence of plants and the problem of language', in M. Gagliano, P. Vieira and J.C. Ryan (eds), The Language of Plants: Science, Philosophy, Literature (Minneapolis: University of Minnesota Press, 2017), pp. 136–154, at p. 141.
- 57 Quoted in Maher, Plant Minds, p. 67.

powers is plausible, and indeed preferable, to extremist positions on either side of the issue.

Maybe the issue that most bedevils vegetal philosophy is the following conundrum of humanism: In accounting for plants philosophically, should we invoke or eschew anthropocentrism and anthropomorphism (or, in parallel, zoocentrism and zoomorphism)? (Brindle frames the problem thus: 'The former is the danger of thinking ourselves to be at the centre of everything; the latter is the danger that, in trying to access non-human experience, we simply mould it into a poor shadow of our own.')58 I myself have had at least implicit recourse to these ideologies - when, for example, I engage the discourse of approximation and describe this or that aspect of botanical being as quasi-x or proto-y (where the tacit standard of plenitude is human/animal functioning). Many plant theorists criticise such discourses. For instance, Baker claims that in articulating the behaviour of plants 'there is no need for [using] "as if" to hint at some entity higher or more advanced (like the human animal).<sup>59</sup> Likewise, Comollo asserts 'we can [and should] leave [existential] space for vegetal and fungal organisms without trying to invest them with "almost animal" characteristics'. 60 Further, Michael Marder inveighs against any humanism that 'grants other creatures the right to speak only on the condition that they ventriloquize quasi-, proto-, or post-human voices'.61 Finally, Stella Sandford is a strong voice of/ for properly plant philosophy, which 'attempts to appreciate the radical alterity of plant life in order to think it ... outside of or beyond the zoocentric [and anthropomorphic] models'.62 Thus in botanical philosophy we see various critical lenses oriented in the direction of anthropocentrism and anthropomorphism.

Now there are few, if any, plant theorists who advocate the unreconstructed usage of these twin strategies. Perhaps some of the bolder

- 58 Brindle, Ways of Being, p. 70.
- 59 Baker, 'The intelligence of plants', p. 146.
- 60 Corrollo, 'A foray into the worlds of plants and fungi', 15. Italics added.
- 61 M. Marder, 'To hear plants speak', in M. Gagliano, P. Vieira and J.C. Ryan (eds), The Language of Plants: Science, Philosophy, Literature (Minneapolis: University of Minnesota Press, 2017), pp. 103–125, at p. 113.
- 62 Sandford, *Vegetal Sex*, p. 14. She chides 'plant advocacy' (as on p. 20) for claiming to share distinctly botanical being while actually beholden to anthro-/zoo-centric/-morphic tropes.

proponents may be said to do such, but even if so they are the exception that proves the rule. Instead, what is dominant in plant studies is a reformed and nuanced utilisation of anthropocentrism and anthropomorphism - something I want to endorse. First, a distinction is made between naïve and critical forms of these ideologies and methods. 'Naïve anthropomorphism draws analogies between myself and the alien entity based on our similarities (likenesses) and thus tries to tame the other by subsuming it to the modes of [existence] that I am most familiar and intimate with.'63 By contrast, 'critical anthropomorphism ... draws analogies between myself and the other entity based on certain congruencies in relations and attitudes, while at the same time insisting on the (unbridgeable) distance of the other'.64 Given this sketch of the difference at stake, it becomes salient to realise that critical variety is on an upswing and attracting substantial attention among commentators in the fields of plant studies and vegetal philosophy. Indeed, Lubbe et al. assert straightforwardly that critical 'anthropomorphic interaction ... can help us appreciate and understand plants'.65 This is because the opposite - what ethologist Frans de Waal used to call anthropodenial - is as bad as, if not worse than, naïve humanism: 'Although anthropomorphism must be approached carefully, an overcorrected avoidance of teleology and anthropomorphism can be detrimental, causing devaluation and undue psychological distance.'66

What is at stake in the issue of anthropomorphism and anthropocentrism is whether we view other organisms as self-complete beings of their own kind or as 'underlings' only approaching some humanistic standard (almost..., quasi-, proto-, etc.). *Ontologically*, I recognise we have the intuitive conviction that other organisms are not lesser humanoids but rather are fully themselves as alien life forms. I do not depart from that impressive intuition. *Epistemologically*, however, it is difficult to know what the essence of any given organism is – and things become even worse for comprehension of specifically botanical beings, what with their alterity confronting us in even starker terms than other animals do. In that respect, then, anthropomorphism and anthropocentrism have

<sup>63</sup> Gaitsch and Vörös, 'Husserl's somatology reconsidered', 219.

<sup>64</sup> Ibid., 219–220.

<sup>65</sup> Lubbe and Alfonzo, 'Plantness, animalness, and humanness', p. 22.

<sup>66</sup> Ibid.

a permissible and indeed necessary function: They can help us build heuristic ladders of conception that afford approximate insight into the lives of analogous aliens.<sup>67</sup> Critical anthropomorphism is not new; rather, it has a history of four decades - and the words of its seminal thinkers are worth recalling: 'It is a disservice to ourselves and to our fellow human and nonhuman creatures to regard any attempt at reaching out as being merely irrational or sentimental.'68 In botany, as elsewhere in the life sciences, there will yet be calls to jettison anthropomorphism and concentrate on difference, <sup>69</sup> but when that happens we can remember Gaitsch and Vörös' injunction for critical anthropomorphism that it makes space for the distance of otherness. Even though we are employing some humanist heuristic, we must never forget that the alien organism is not living its own life as an approximation of ours – it is a complete version of its (nonhuman) self. Finally, we ought to heed the advice of Mintautas Gutauskas - 'anthropocentrism as an ideology should be criticised', he explains, 'but it is impossible to avoid anthropocentricity as a [transcendental] condition of [human] experience'.70

## **MORALITY**

Most of what I have had to say on the metaphysical level can be put in a nutshell by indicating that, ontologically, I believe plants are *quasi*-worlded/agential/intelligent/minded/conscious/sentient/ etc. beings. That anthropocentric/anthropomorphic judgment can be defended by

- 67 Cf. Pouteau's concession: 'One may argue that we simply do not yet have appropriate words for plants and that the use of zoomorphic words is the only way forward at the moment'; and her plea: 'we still need additional means to truly understand what it is to be a plant, irrespective of what it is to be an animal' let alone a human being. 'Beyond "second animals", 22, 23.
- 68 R. Lockwood, 'Anthropomorphism is not a four-letter word', in M.W. Fox and L.D. Mickley (eds), *Advances in Animal Welfare Science* (Washington, D.C.: The Humane Society of the United States, 1985/86), pp. 185–199, at p. 198.
- 69 C. Holdrege, 'The wisdom of plants', webinar, The Nature Institute, New York, May 2024 [orig. Apr. 2022].
- 70 M. Gutauskas, 'Anthropocentrism and two phenomenological approaches to animal life', *Problemos* **105** (4) (April, 2024): 45–62, at 48, italics added. Here Husserl's phenomenological finding is: 'brutes [*sic*] are essentially constituted for me as abnormal "variants" of my humanness'; quoted in ibid., 47.

pointing out that, epistemologically, we have little alternative to humanist heuristics in accounting for botanical organisms. Given these positions, it will perhaps not be surprising that — on a moral level — I hold plants to be  $\it proto$ -considerable beings. Let us see how that ethical stance develops from the ontological commitments made above.

The first step is to clear away those beliefs and attitudes that prove to be unhelpful in giving due moral consideration to the vegetal realm. J.L. Arbor, for example, has it that we should shed the 'animal chauvinism' that characterises so many Western traditions.<sup>71</sup> Matthew Hall, in addition, is right to worry about our often unduly humanist inheritance: "The intellectual violence of backgrounding plants and [completely] denying their sentience can be said to underpin the "occupation, appropriation, and commodification" of the plant kingdom and thus the wider natural world.'72 Likewise, Robin Attfield asserts that the vegetal domain, such as 'forests ... cannot be regarded as resources only'. 73 Another moral hamstring is the ploy of ethical extensionism, whereby a new range of entities is viewed and/or treated in terms made for an already established range of moral regard. Against this gambit of inauthentic coverage, Gianfranco Pellegrino has held that 'the extensionist strategy cannot account for the value of particular plants – or for the particular value of plants'.74 This is because it fails to register the inherent value of specimens as such – not as instantiations, receptacles, or carriers of general or abstract values (e.g., the significance of species or sentience per

- 71 J.L. Arbor, 'Animal chauvinism, plant-regarding ethics, and the torture of trees', *Australasian Journal of Philosophy* **64** (3) (1986): 335–339, at 339.
- 72 Hall, *Plants as Persons*, p. 7. See also p. 159, where Hall implicitly rejects utilitarianism for the purposes of plant ethics: 'Our wholly instrumental relationships with plant life are inappropriate because they are a very significant contributor to the current anthropogenic environmental predicament'. The idea here is that such an outlook precludes our entry into salutary connectivity with botanical beings and thus abets ecocidal tendencies on the part of humanity.
- 73 R. Attfield, 'Forest ethics', in A. Kallhoff, M. Die Paola and M. Schörgenhumer (eds), *Plant Ethics: Concepts and Applications* (New York: Taylor & Francis, 2018), pp. 121–130, at p. 126.
- 74 G. Pellegrino, 'The value of plants', in A. Kallhoff, M. Die Paola and M. Schörgenhumer (eds), *Plant Ethics: Concepts and Applications* (New York: Taylor & Francis, 2018), pp. 13–29, at p. 18. Cf. K. Houle: 'Becoming-plant is ... a heterogenous alliance we make which expresses in action the unique qualities of plants or plant lives.' 'Animal, vegetable, mineral: Ethics as extension or becoming?', *Journal for Critical Animal Studies* 9 (1/2) (2011): 89–116, at 97.

se). However, we shall see below that extensionism may be redeemable (at least partially).

Similar to Pellegrino, Yogi Hendlin has recently offered a sustained critique of plant proponents' stronger ontological theses and of the ethical extensionism implicit in their promotional stance. He argues that anthropomorphism in plant advocacy (e.g., talk of vegetal *neuro*biology) is ultimately anthropocentric in that it frames plants as being 'just like us' and then attempts to derive normative mileage from that alleged fact (their human-like status). The view endorsed by him is that 'comparing plants to humans or animals [anthropocentrism or zoocentrism] undervalues the true marvels of plant behavior on their own merits [phytocentrism]'. Instead Hendlin advocates an ethos of botanical difference, according to which 'permeability to the [vegetal] other has to do with how willing one is to be influenced in kind by the deemed-to-be-different other'. The stronger of the sustained of the sustained and the sustained and the sustained are received as the sustained are received as the sustained and the sustained as the sustained as the sustained are received as the sustained as t

I would like to argue against this position on a couple of fronts. First – and this pertains as well to a whole slew of negative commentary on ethical extensionism across the humanities and social sciences - I maintain that extensionism is *not* exclusively or even primarily anthropocentric. The mere fact that a moral theory takes, say, sapience or sentience (or vitality) as a badge of moral considerability does not commit it to a self-serving humanism (where the hallmarks of intelligence, feelings and life are actually modeled after the capacities of homo sapiens). It can be, and in fact at least sometimes this is the case, that extensionists are setting an objective criterion of moral standing and then pointing out which sorts/species of beings qualify for consideration on that basis (often inclusive of humans, but not necessarily prejudicially so). The consensus view in transhuman moral philosophy, that extensionism is radically flawed because essentially anthropocentric, borders on the verge of self-hating misanthropy. That is because it insists on allegiance to a misplaced hermeneutics of suspicion (see, the model is really human after all!), when we should instead wield a principle of

<sup>75</sup> Y. Hendlin, 'Plant philosophy and interpretation: Making sense of contemporary plant intelligence debates', *Environmental Values* **31** (3) (2022): 253–276.

<sup>76</sup> Ibid., 255.

<sup>77</sup> Ibid., 264.

<sup>78</sup> Ibid., 268.

charity to interpret attributions of considerability (look, there is a bunch of *non*humans who/that qualify as well as humans).

Second, I am not so sanguine as Hendlin about the putative virtues of alterity in moral discourse: It seems to me that, on the contrary, the ethics of difference much-touted by many postmodernists can fetishise the other as such and thus lead to moral alienation or estrangement; likewise, it can occlude areas of commonality that could serve the salutary function of connecting otherwise different entities. At stake here is an archetypal tension between identity/similarity and alterity/difference – what I want to suggest on this front is that partisans of the latter to the expense of the former might be operating against a primordial affinity for sameness or commonality: Since affiliation with similitude brings with it the survival advantage of adapting to familiar factors (as opposed to risking much truck with the strange or unknown), we could be dealing with an orientation of evolutionary depth and strength. If anything like that is true, we would do well to accommodate our yearnings for similarity and cast a more appreciative eye on the prospects of extensionism (including its application to the vegetal dimension).<sup>79</sup>

Still, on grounds similar to Hendlin's above, some have judged animal ethics to be inadequate for providing guidance in discernment of our rights and responsibilities on the vegetal front. <sup>80</sup> Penultimately, and quite globally, Pouteau argues that 'biological ethics, the type of ethics needed to properly address vegetative life, should itself develop an allembracing moral consideration' that transcends every centrism. <sup>81</sup> Lastly, plant theorist Jeffrey Nealon cautions against grounding any biopolitics in the secure identities of moral patients and recommends instead that we attend to the histories of contested categories. <sup>82</sup> Thus we see, in a variety of ways, what to avoid in proffering an ethic of plants.

<sup>79</sup> In this passage, I am seeking not a victory of sameness over difference, but rather a restoration of equilibrium between the two principles (at least in their application to inter-species ethics).

<sup>80</sup> K. Houle, *Plant Ethics*, p. 72. Cf. Pouteau: 'A plant must be defended for itself and not for a theoretically decerebrated animal.' 'Beyond "second animals", 18.

<sup>81</sup> Pouteau, 'Beyond "second animals", 22.

<sup>82</sup> J. Nealon, Plant Theory: Biopower and Vegetable Life (Stanford: Stanford University Press, 2016), pp. 114–115. I worry that this stratagem might encourage a botanical ethic or planty politics to devolve into balkanised historicism.

This brings us to the next and natural step - that is, considering what should be brought forth for affirmation in a moral philosophy of botanical breadth. First, it is important to appreciate that a partial overlap between ethics and the vegetal is made possible by an elementary empathy that is mediated by the live body as such: we reach out, psychosomatically, and find a fellow life form in the plant (a fundamental sense of vitality is at work in this botanical maneuver of morality).83 Here there is also place for critical anthropomorphism to be exercised, for joyful or spirited interaction with plants as quasi-personalities can help foster a moral sensibility in their regard.<sup>84</sup> Coming into the heart of the matter, it is well to recognise that some have argued on behalf of moral standing for plants based on their autonomous attributes. 85 There is room here, of course, for critics to protest that plants manifest only quasi-autonomous properties – and thus standing obtains in an attenuated sense only. Others, such as Taylor, have explained that viewing an organism as a TCL allows us 'to make the moral commitment involved in taking the attitude of respect toward it, even though [doing that] does not necessitate our making the moral commitment'.86 (Contrast Warren's position: 'The facts of ecology provide no conclusive reason to respect all living things ... Neither science nor pure reason can compel us to respect all life.'87) Clearly, Taylor here is making a case for the ethical standing of all life. Although he does not here explicitly extend this account to vegetal entities, I was a student of his during the publication year of Respect for Nature and can testify that he endorsed that extension, such that plants may at least be said to have proto-standing in the moral arena. Relatedly, some have seen plants as bearers of inherent

- 83 Recall Gaitsch and Vörös in 'Husserl's somatology reconsidered', who argue in a similar vein.
- Remember Lubbe and Alfonzo, 'Plantness, animalness, and humanness', who drive at a similar point.
- 85 Hall, Plants as Persons, p. 160.
- 86 Taylor, *Respect for Nature*, p. 129. Cf. Mary Anne Warren's argument: 'Because living things are goal-directed systems that have a good of their own, they can be harmed, in that their goals can be thwarted. For this reason, we can often empathize after a fashion even with plants'. *Moral Status: Obligations to Persons and Other Living Things* (Oxford: Clarendon Press, 1997), p. 151.
- 87 Ibid. Whereas Warren focuses on the constraints of logical validity, Taylor is concerned rather with what *psycho*logical coherence (between a biocentric outlook and the attitude of respect for nature) affords or encourages.

worth, for example Ronald Sandler. (And Arbor agrees that the natural integrity of vegetal life commands our respect.)<sup>88</sup> Following Taylor, he explains thus: 'To say that something has inherent worth is to claim that (1) it has interests or a good of its own, and (2) moral agents should care about its interests for its own sake.'<sup>89</sup> A critic might object that a plant does not have a 'sake' in the first place. However, I think its TCL fixes a sake such that we can respect or care about it in an elementary mode of moral regard.

Moreover, the bodily mediation of that regard is significant. What I have named symphysis has two levels of operation: Somatic sympathy has a zoocentric remit and brings into play what I call corporal compassion between animals (human or other)<sup>90</sup> – in effect, this account represents a moral psychology of our dealings with animals; there is also a phenomenon of what I would term a somatic symbiosis that has a biocentric remit inclusive of plants and that undergirds corporal coexistence or embodied entanglement – this account ushers into view a proto-ethical communion with vegetal life.<sup>91</sup> It is worth noting that there is relevant poetic testimony here. Mary Oliver's work, as glossed by John C. Ryan, provides salient insight: there, 'through their material registers, vegetal beings engage in somatic exchange with the conspicuously mobile bodies of insects, birds, mammals, and humans'.<sup>92</sup> Indeed, 'Oliver lyricizes vegetal embodiment as necessarily intercorporeal; plant presence emerges through contact and spirited exchange with humans,

- 88 Arbor, 'Animal chauvinism, plant-regarding ethics, and the torture of trees', 338.
- 89 R. Sandler, 'Is considering the interests of plants absurd?', in A. Kallhoff, M. Die Paola and M. Schörgenhumer (eds), *Plant Ethics: Concepts and Applications* (New York: Taylor & Francis, 2018), pp. 40–50, at p. 40. Cf. Pouteau: 'If being alive represents a good on its own, then all living beings should be recognized as having vital interests and for this reason deserve moral consideration.' 'Beyond "second animals", 10. An anonymous reviewer worries here that the normative upshot of recognising teleology is rather underwhelming, but I would highlight that the difference between some significance (even if small) and *none at all* is mathematically infinite and pragmatically worthwhile.
- 90 Acampora, Corporal Compassion, chap. 4.
- 91 Symbiosis is not always cooperative: In the case of parasitism, for instance, there arises actual **dis**value (from/for one side of the relationship).
- 92 J. Ryan, 'That porous line: Mary Oliver and the intercorporeality of the vegetal body', *Plants in Contemporary Poetry: Ecocriticism and the Botanical Imagination* (New York: Routledge, 2018), pp. 53–80, at p. 68.

animals, insects, and other plants'. This kind of encounter upsets views of plants as merely subservient beings, and thus 'intercorporeality brings to the fore the potent awareness that human and nonhuman bodies are subjected to the same circumstances and partake in a common fate'. An essentially Buberesque insight is made manifest here – namely, that the live body (*Leib*), replete with resonances of physical animacy, is the existential substrate that activates moral and semi-moral experiences even with vegetal life.

Here then we arrive at matters of applied ethics in a botanical context. Hall offers guidance on this front: We should balance the interests of individuals and wholes, an ecological sensibility allows for usage of vegetal life, and we should endorse an injunction whereby waste via over-consumption is proscribed. 94 Regarding the second of these factors, Hall lays special emphasis on the notion that plant ethics does not necessarily call for an end to agriculture and thus a popular reduction to absurdity of vegetal morality can be laid to rest. 95 His central idea here is that ecology allows for heterotrophy and therefore it cannot be held immoral (so long as it is sustainable). Others have also been concerned to preempt any impracticality of applied botanical ethics - Maher, for instance, argues that 'we could acknowledge all organisms have protominds without feeling obliged to be more protective of them ... It's not clear that plants or bacteria feel pain, at all.'96 I would remind us at this juncture that the quasi-worlding of plants does suggest a proto-ethical status greater than nil - even if less than animals, say, still more than rocks. <sup>97</sup> This last point should not be understated: As Bridle has it, 'the acknowledgement of multiple other worlds ... is key to ... re-entangling ourselves with a more meaningful and compassionate cosmology'.98

<sup>93</sup> Ibid., p. 75.

<sup>94</sup> Hall, Plants as Persons, p. 163. Cf. Arbor's more hardline stance that bonsai, e.g., tortures trees ('Animal chauvinism, plant-regarding ethics, and the torture of trees', 336–337).

<sup>95</sup> Hall, 'Plant autonomy', p. 170.

<sup>96</sup> Maher, *Plant Minds*, p. 126. The implicit premise here is that sentience confers substantial status, ethically speaking.

<sup>97</sup> Such a stance is unlikely to please ethical absolutists and egalitarians; it is consistent, on the contrary, with Warren's multi-criterial approach to moral status (*Moral Status*, chap. 6).

<sup>98</sup> Brindle, Ways of Being, p. 68.

Plants are creatures betwixt and between - they challenge categories and resist being pigeonholed. In this article, I have shown that the best way to characterise them, metaphysically speaking, is as quasi-worlded organisms that have a kind (or sort) of perspective on their lives and situations. I have rejected the position of those who seek to cast them as actual persons or people;99 and I have likewise rejected the stance of those critics who fail to distinguish them from the lithic. The resulting moderate portrait is, I would argue, best not because it is middling but rather because it follows the evidence more closely than rival views. 100 Methodologically, since the vegetal realm resists infiltration by human consciousness, I have endorsed critical stances on anthropomorphism and anthropocentrism as handy heuristics for the study of botanical beings. After plumbing ontological matters, I endeavoured to sketch the outlines of morality that takes plants seriously - appropriate to their quasi-worlded condition, plants can be seen to occupy a proto-ethical position. This outlook grants a status greater than minerals yet less than animals, and thus plants' interests assume an intermediate zone of regard.

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- 99 Cf. T. Puleo, 'Incorporating nonhuman subjectivity into world society: The case of extending personhood to plants', in D. Jung and S. Stetter (eds), *Modern Subjectivities in World Society: Global Structures and Local Strategies* (Cham: Palgrave Macmillan, 2019), pp. 211–228, who argues that plants qualify on six criterial registers for personhood (see p.12); his case seems to me overly charitable.
- 100 Note, though, the idea that moderation is a virtue has an eminent heritage, going back at least to Aristotle.