Imagine a being capable of processing, remembering and sharing information – a being with potentialities proper to it and a world of its own. Given this brief description, most of us will think of a human person, some will associate it with an animal and virtually no one's imagination will conjure up a plant. Since 2 November 2011, however, one possible answer to this riddle is Pisum sativum, a species colloquially known as the common pea. On that day, a team of scientists from the Blaustein Institute for Desert Research in Be’er Sheva, Israel, published the results of their research, revealing that a pea plant subjected to drought conditions communicated its abiotic stress to other such plants, with which it shared its rooting volumes. In other words, through the roots, it relayed to its neighbours the biochemical message about the onset of drought, prompting them to react as though they, too, were in a similar predicament. Curiously, having received the signal, plants not directly affected by this particular environmental stress factor were better able to withstand adverse conditions when these actually occurred. This means that the recipients of biochemical communication could draw on their 'memories' – information stored at the cellular level – to activate appropriate defences and adaptive responses when the need arose.

The once derided conclusions of Peter Tompkins and Christopher Bird’s 1973 classic The Secret Life of Plants are coming back with a vengeance, buttressed with hard scientific data. The research findings of Omer Falik and his team form yet another small building block in the growing fields of plant intelligence studies and plant neurobiology that, at the very least, ought to prompt us to rethink our relation to plants. Is it morally permissible to submit to total instrumentalization living beings that, though they do not have a central nervous system, are capable of basic learning and communication? Should their swift response to stress leave us coldly indifferent, in contrast to animal suffering, which can provoke intense feelings of pity and compassion? Evidently, empathy might not be the most appropriate ground for an ethics of vegetal life. But the novel indications concerning the responsiveness of plants, their interactions with the environment and with each other, are sufficient to undermine all simple, axiomatic solutions to eating in good conscience. When it comes to a plant, it turns out to be not only a ‘what’ but also a ‘who’, an agent in its milieu, with an intrinsic value or version of the good. Inquiring into the justifications for consuming vegetal beings thus re-conceived, we reach one of the final frontiers of dietary ethics.
By ‘simple, axiomatic solutions’ I mean Peter Singer’s utilitarian defence of vegetarianism, the eating philosophy he views in *Animal Liberation* under the lens of negativity, as a veritable boycott of modern animal farming and a way to reduce the total amount of suffering in the world. The obverse of this approach is the absolute and quite uncritical positive reliance on plant foods for the satisfaction of global alimentary needs. It is understandable why Singer has no qualms about giving preference to and sparing the life of any animal, when faced with the choice between it and a plant. But what is less forgivable is the general lack of concern with the fate of plants and with the violence inherent in contemporary horticulture. The calculus of pain prevents the philosopher from realizing that a complete reduction of a group of non-animal living beings to materials for human consumption cannot deserve the appellation *ethical* outside a strictly utilitarian frame of reference.

Nothing prevents utilitarianism from accommodating new scientific findings on the quasi-cognitive capacities of plants by mapping them on a continuum that extends from a minimum of sensitivity (Schelling’s word for this zero-point is *irritability*) to full-fledged suffering. Yet, in doing so, utilitarian thought would still fall far short of science at its finest, which, in harmony with philosophy, prompts us, on the one hand, to eschew all past prejudices attached to an object of knowledge and, on the other, to prepare for and cherish the unsettling experience of wonder accompanying our re-discovery of the world. Unlike utilitarianism, plant intelligence studies excel in this endeavour, to the extent that they tirelessly stimulate fresh approaches to and provide surprising descriptions of what it means to be a plant. Over the past three decades many of our presuppositions about vegetation have crumbled and, with them, evaporated the illusion that we can be innocent and harmless in our eating practices. It is impossible not to feel a sense of wonder, if not shock, upon learning that, after all, to eat a plant is to devour an intelligent, social, complex being. The question is how to linger in this unsettling condition, without ‘getting over’ it, so that ethical sensibilities would be sharpened and enriched, rather than dismissed altogether.

A utilitarian response, fine-tuning the gradations of suffering and the relevant cost-benefit analyses to account for the newly formulated ontological and moral status of plants, is clearly inadequate. Bentham’s idea that, in calculations of the greatest happiness ‘each person is to count for one and no one for more than one’ would not work, even provided that plants were factored into the equation, because they are not discrete vegetal ‘persons’, neatly fitting into the basic distinction between the one and the many. Be this as it may, if neither vegetarianism nor veganism can provide a symbolic refuge place to those who care about the moral choices they make along with their menu selections, then this means that there is no such thing as dietary righteousness. Perhaps, eating is inherently unethical, a violent destruction of the immediate autonomy of the eaten incorporated into the eater; perhaps, it is simply impossible to eat ethically, hard as we may try. These provisional conclusions should not be taken as symptoms of despair and, least of all, as reluctant supports for the indiscriminate consumption of any living being whatsoever. On the contrary, they should stimulate further thinking about what we actually do when we eat a plant.

Some would certainly object that discussions of nutritional ethics grow out of idle, armchair reflections, irrelevant at best and pernicious at worst, ones that detract

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M. Marder
30
public attention from a much more catastrophic situation of global food shortages and soaring staples prices. Wouldn’t it be preferable to resort to any agricultural technique, so long as it served the purpose of producing enough food to eliminate hunger? Do issues pertaining to so-called plant ethics matter, when much graver problems facing human beings remain unresolved?

The choice between respect for plants and the elimination of hunger is a false one, determined as it is by highly ideological considerations. What the above either-or formulations fail to account for is agro-capitalism, which is the common root of artificially created scarcity and violence against nonhuman life forms, whether vegetal or animal, produced with the view to maximizing corporate profits. The ongoing struggle for human emancipation (for instance, from the brutality of physical need) cannot ignore the plight of nonhuman beings, whose worth, in the logic of capital, is nil outside of the commodity prices they are converted into. Plant liberation, if at all possible, would not be at odds with collective human interests, reclaimed against the calculative rationality of capitalism. It would not be a matter of personal choice, as liberals and utilitarians would want to make us believe, but, rather, of a political-economic reorganization and of shifting our thinking away from efficient systems of food production to modes of solidarity and cohabitation – nutritive not excluded – with other living beings.

To return to the problem at hand: the shockwaves emanating from the current research on plant intelligence interfere with the certainty that vegetarianism and veganism are ethical. Philosophy, in this instance, has to do some catching up with science, so as to assess the full implications of the previously unknown capacities of plants. One path it might take in this pursuit is resorting to the arsenal of the most important philosophical questions: *that, how and what*. What is behind the biological and cultural compulsion that one must eat? How should one eat? And what should one eat?

*That* we must eat is not so much a question as it is a source of puzzlement, especially granted that this brutal ‘fact of life’ necessarily renders our actions unethical. In order to maintain themselves alive, humans and animals – but not most plants – must terminate the lives of others. It would be silly to bring to an abrupt close the nascent line of inquiry here, by deriving a crude ‘ought’ from a biological (better: biologist) ‘is’, or, in other words, by arguing that ‘eat or be eaten’ is the immutable reality and the essential norm of animal and human existences. Cultural-religious practices, such as fasting, meant to bring believers closer to divinity through the mimesis of angelic nature and conditions, such as anorexia and bulimia, suspend, if only for a few exceptional instances, the law of necessity. These examples may well be *contra natura*, insofar as fasting futilely rebels against human finitude, which reasserts itself in the form of hunger, and eating disorders aim altogether to dispense with the body as an extension or a volume. The philosophical quandaries, ‘Is it ethical to eat X?’, and simply, ‘Is it ethical to eat?’, if not philosophy as such and as a whole, border on an eating disorder in the realm of thought. Their purpose, however, is to expose the more severe malady that surreptitiously announces itself in the commodification of living beings, their reduction to an impassive ‘what’, and their tethering to one function alone – being a storehouse of calories, proteins, carbohydrates and so forth.
‘Is it ethical to eat?’ justifiably resonates in our ears in the form of a more profound question, ‘Is it ethical to be?’ (It is not by chance that the Russian verb ‘to be’ is identical, in the variant yest’, to the verb ‘to eat’). Regardless of this resonance, it would be wrong to imbue both queries with nihilistic overtones. To problematize the violence inherent in merely being, in the manner of Emmanuel Levinas, whose entire philosophy challenges the egoism of occupying ‘one’s place in the sun’, or to attempt to minimize – as followers of Jainism do – the destruction of insects we cause by the sheer act of walking, is not to take a step toward a devaluation of human life. Quite the opposite, these theories and practices impart new meaning to our existence and contend with the very meaning of meaning, as Levinas would surely put it. ‘Is it ethical to eat?’ is not a call to collective anorexia but to a deeper appreciation of the sense of being human, inexplicable through purely biological references to natural necessity. The intense pleasure built into acts of eating and conscious decisions surrounding what we eat imply that these acts are far from a quasi-mechanical refuelling of the organism. Interrogating them, we follow – still or already – the vein of the ancient injunction, ‘Know thyself!’

That we eat, our ability to extract from food those nutrients that keep us alive, is what humans actually share with animals and plants. The nutritive capacity is a trace of the plant ‘in’ us, of the vegetative soul, or, in Aristotelian language, to threptikon, common to all living beings and perfected by plants. (Aristotle deemed this capacity proper to vegetal beings as a foundation for the other two types of soul, the sensitive and the rational.) Before eating plants or animal flesh, we eat thanks to plants. Ontically, this means that they are the cornerstone of our diets, an indispensable part of all animal nutrition. On the ontological level, however, the conclusion is that we are capable of eating thanks to a fundamental facet of plant being or existence, irreducible to the mechanics of osmosis. Everything that lives must practice the ownmost activity of the vegetative soul. In and of itself, such striking commonality has the potential of counterbalancing the divisiveness of ‘eat or be eaten’ with the communion of creatures endowed with to threptikon. Aristotle, of course, was convinced that this was the sole capacity of plants, while current research in botany shows that they engage in much more complex behaviours as well. Still, the common base remains unaffected: whenever we eat, we do so with the plants and with all other living beings who partake of the principle of the ‘vegetative soul’. Pursuing radical self-knowledge, we discover the uncanny plant in us.

It is something of a dogma in philosophy of biology that how we eat, the mode of nutritive activity proper to humans and animals, is what, at bottom, distinguishes us from plants: animal mobility and economization of external surfaces make the active search for sources of food more efficient, whereas plant sedentariness and exposure optimize the passive capture of sunlight and minerals drawn from the soil. Given this dramatic divide, is it possible to learn from plants how to eat ethically, with the least amount of violence? Generally, animal feeding is taken as the model of nutritive activity as a whole: eating is, in the words of Jacques Derrida, the ‘metonymy of introjection’. Plants, conversely, do not feature the same rigid distinction between the inside and the outside; they lack the dimension of depth, even if they are physical volumes. As media for the exchange of gases, in a definition that is avowedly Schellengian, they are the tubes, the channels or the passages for the (inorganic)
other they welcome in their acts of living. The register of this incredible biological hospitality is the body of the plant, the spatio-temporal archive (legible, for instance, in the rings of a tree trunk) of everything it received and subsequently exteriorized, turning ‘excretion’ into an extension of itself, in the most elegant solution to the problem of elimination. The point is that, though they are discerning in their subterranean ‘foraging’ for fertile patches of the soil, for plants, eating is not tantamount to interiorization but to a sort of receptivity, a channelling of the other and an orientation to the outside.

What would it take for humans to learn to eat like plants, or, as I put it in Plant-Thinking, to ‘welcome […] the other and turn […] oneself into the passage for the other without violating or dominating it, without endeavouring to swallow up its very otherness in one’s corporeal and psychic interiority’? The how of human eating entails much more than a biological process; it is also and above all, a cultural practice enveloped in a set of generally unquestioned attitudes. How we eat is a physical reflection of how we think, an embodied laboratory of our relation to the outside world in all its materiality. In his fragmentary psycho-physiology, Nietzsche works with this basic supposition and finds direct correlates not only between climatic conditions and thought but also between eating, being and thinking. We are what we eat both in our bodies and in our minds: if we eat plants, we are, in a certain sense, plants. We imbibe their m-RNA which comes to regulate the expression of our own genes, and we think or will like them, adopt their will-to-power (growth in strength) as our own.

The modes of eating and thinking may fall into one of two extremes. Either the eater-thinker preys upon the object, devours, interiorizes and assimilates it, or, conversely, she lets it pass through, turning herself, precisely, into a passageway for it and allowing the object to become everything that it could be. This second nutritive modality humans may adopt from plants that neither devour their food nor store it in the deep recesses of subjective or objective interiority, for they lack anything like a stomach and their ‘lungs’ are outside, on the surface of the leaves. To be sure, human beings cannot ignore their own physiology, which is dissimilar to that of plants, but they can adjust their conduct in such a way that the other, as other, is not eaten up when it is encountered, experienced, thought, or even eaten. How is this to be achieved?

If there were a single recipe for respectful eating practices, it would have prescribed the following: to remember at all times that the beings we eat or experience are much more than storehouses of calories or of information and that they have a whole range of other potentialities irreducible to providing us with nourishment, including everything that falls under the category of ‘food for thought’. All too often, philosophical teleologies, invariably harking back to the Biblical narrative of creation, have assumed that the world and the living beings populating it have been intended for unrestricted human usage. Dialectically speaking, a bowl of pea soup consumed by a human being negates the independent, external existence of peas but, in so doing, it also elevates them, to the extent that they now come to fulfill a higher purpose as a source of energy for rational creatures. Along with the actual vegetal beings (the peas), their entire being is consumed without remainder, in that it gets assigned to a single end, extraneous to the plants themselves. Eating plants
becomes an intermediary step toward digesting vegetal ontology, just as the secret goal of consumerism is not to possess this or that object but to consume the world in its totality. The actual, indeed, becomes rational within the stricture of instrumental rationality bent on extracting maximum potential from the beings it then discards, robbing them of their future.

In turn, persistent reminders concerning the existential possibilities proper to plants – those frequently termed ‘intrinsic value’ – bring us back to vegetal ontology, at present greatly impoverished due to the unabashed instrumentalization that restricts the scope of what plants can be and do. We must work at broadening the range of meanings, as well as what to us appears as meaninglessness, implicit in the historically specific being of plants. An eating practice receptive to their otherness accepts the ontological fact that they exist neither for human enjoyment and consumption, nor for the sake of anything or anyone (perhaps, not even themselves, to the extent that they have no ideal selves). At minimum, a welcome extended to vegetation requires that we resist the urge to take away its existential potentialities, including, in the first instance, its reproductive capacity and, hence, futurity. Seed saving practices are congruent with this formal principle, whereas genetic modification yielding patented seeds with ‘non-renewable traits’ is not.

More than that, hospitality to the being of plants dictates certain limits on their cultivation – a possible but, by far, not the only mode of human-plant relations. Preservation of wilderness, itself a category constructed in opposition to (and, therefore, presupposing) cultivation, is but the tip of the iceberg here. The point is simply to let plants be, regardless of whether we consider them useful, useless, or harmful, be they fruit trees or weeds. Letting vegetal beings be means keeping in check a domineering attitude toward them, the attitude that underpins the largely successful efforts aimed at engineering their genetic makeup. (Let us recall, briefly, that *Pisum sativum* was the first plant Gregor Mendel subjected to selective cross-breeding in the period between 1856 and 1863, leading up to the ground-breaking discovery of dominant and recessive traits). And, above all, it means not eating ‘too much’, in the ontological sense of the expression: not consuming the being of plants as the supplement to the eaten plants themselves and not endeavouring to produce vegetal life as such and as a whole.

There is – it must be said – also a downside to eating like a plant, especially when that injunction is interpreted literally or ontically. In this sense, it can imply eating continuously and uninterruptedly, being tethered to the food source and indiscriminately absorbing everything, in the manner of the roots and their osmotic workings. Mapped onto human physiology, incessant eating devours the world, instead of triggering our plant-like exposure to exteriority. What would eating and experiencing be like if, rather than shedding light onto our objects and assigning definite purposes to them, we exposed ourselves to light or, at least, engaged in a mutual relation with plants? In addition to controlling plants, we would feel ourselves controlled by them, acting on their behalf, for instance, by spreading their genes around the globe. Ontological freedom (letting vegetal beings be) and the inversion of exposure would jointly constitute the enabling limits to eating and to sovereign experiencing. Within these limits dietary ethics would finally be thinkable, albeit never purely achievable.
Agnès Varda’s documentary, *The Gleaners and I* (*Les Glaneurs et la Glaneuse*, 2000) interweaves the experiential and alimentary dimensions of gleaning in an aesthetic medium especially propitious to what the filmmaker herself designates as the gleaning of images. The practice operates strictly within the double limits of ontological freedom and the inversion of exposure: the beings (both human and nonhuman) are let be without being framed in a formal narrative, while Varda exposes herself (for example, her aging hands and hair) before the lens of the camera, refusing to make sense of the images she had gleaned. A less futuristic, more melancholy to the point of nostalgia, recapturing of Dziga Vertov’s 1929 *Man with a Movie Camera*, *The Gleaners and I* is an example of the practical, cine-phenomenological reduction of human experience and its subsequent approximation to an anarchic, vegetal proliferation of images.

Equally noteworthy is the context of gleaning as a socio-economic practice of the oppressed, that is to say, of those who are, themselves, discarded by the dominant system of production and who stoop to pick up similarly rejected plants and parts of plants, objects and part-objects. The contemporary variation on this behaviour, sufficient enough to thwart the temptation to romanticize it, is urban gleaning, which, likewise, results in the picking and eating of what has been thrown away. Gleaners, more often than not, have no other choice but to procure food by seeking what remains after the harvest or in the aftermath of wasteful consumption in urban centres. Not so with the aesthetic gleaners, such as Varda herself, who engage in this activity not out of necessity but out of the freedom afforded by art. This divide is telling and troublesome to the *nth* degree. Only on the condition that we begin to bridge it and only provided that aesthetic freedom is transposed onto the realm of necessity would gleaning become a truly ethical way of eating and experiencing.

Gleaning presupposes a great deal of roaming, active searching and selectivity, all of which are not only stereotypically animal-like behaviours but also the principles of plant mobility – of the roots that roam underground labyrinths in search of nutrients and the branches and leaves that seek sunny gaps in the thick of a forest, for instance. At the same time, it obeys the more obvious tenet of plant existence, whose ‘reach cannot exceed its grasp’, in the words of French poet Francis Ponge. Eating locally grown foods comes close to the mode of this existence, even though human reach always exceeds what we can grasp both temporally and spatially, due to the projection of past experience into the future and the augmentation of our capacities by means of technological prosthetics. Spatially delimited eating practices – eating *in a place* – facilitate the emergence of alternative forms of human community with plants, which would have been unthinkable without our physical proximity to them. In fact, throughout our lives, we are either too close to vegetation (the grass one treads on, the apple one bites into) to even notice it or we are too far to be aware of it (take cocoa plantations in Sao Tome and Principe, the world’s biggest producer of this crop). To be with the plants is, in Martin Heidegger’s turn of phrase, to de-distance them, to bring oneself close to them without collapsing the space of separation altogether by devouring them. It is to come to terms with the insight that something of their being will always escape and exceed both our grasp and our reach, in a fugal movement that inaugurates, time and again, the conditions of possibility for our relation to them. And, despite the divergent paces at which
human and vegetal existences proceed, it is also to linger with them in time, to wait for their maturation, to allow them to unfold or to withhold their hidden potentialities. Gleaning, in this scheme of things, is awaiting past the set term; the patience of gleaning translates into a chance for the plants’ posthumous existence redeeming the violence of their sublation in eating.

The answer to the question what we can eat, as much as the loose guidelines for how to eat ethically, is imbricated with the ontology of plant life. As recent studies in botany have demonstrated, plants are not only a ‘what’ but also a ‘who’, and this implies that dietary preferences, too, must practically differentiate between vegetal ‘whatness’ and ‘whoness’, while striving to keep the latter intact. The work of such differentiation is incredibly difficult because the subjectivity of plants is not centred in a single organ or function but is dispersed throughout their bodies, from the roots to the leaves and shoots. Nevertheless, this dispersion of vitality holds out a promise of its own: the plasticity of plants and their wondrous capacity for regeneration, their growth by increments, quantitative additions, or reiterations of already existing parts does little to change the form of living beings that are neither parts nor wholes because they are not hierarchically structured organisms. The ‘renewable’ aspects of perennial plants may be accepted by humans as a gift of vegetal being and integrated into their diets. But it would be harder to justify the cultivation of peas and other annual plants, the entire being of which humans devote to externally imposed ends. In other words, ethically inspired decisions cannot postulate the abstract conceptual unity of ‘the plant’; they must, rather, take into account the singularity of each species with its unique temporality and non-generalizable existential possibilities.

The emphasis on singularity means that ethical worries will not go away after normative philosophers and bioethicists have delineated their sets of definitive guidelines for human conduct. More specifically, concerns regarding the treatment of plants will crop up again and again, every time we deal with a distinct species or particular community of plants. In Hans Christian Andersen’s fairy-tale, ‘The Princess and the Pea’, the true identity of a princess is discovered after she spends a torturous night on top of twenty mattresses and twenty featherbeds, with a single pea lodged underneath this pile. The desire to eat ethically is, perhaps, akin to this royal sensitivity, as some would argue that it is a luxury of those who do have enough food to select, in a conscious manner, their dietary patterns. But there is a more charitable way to interpret the analogy. Ethical concerns are never problems to be resolved once and for all; they make us uncomfortable and sometimes, when the sting of conscience is overwhelming, prevent us from sleeping. Being disconcerted by a single pea to the point of unrest is a metonymy for ethics as such, for the obsession that it is, inexpressible in the language of moral axioms and principles of righteousness. Self-reflexive dietary ethics, attuned to all living beings, refrains from making fully assured pronouncements on how best to treat the specimen of Pisum sativum, or any other plants, for which the pea stands, despite its smallness, in yet another metonymic relation. Such ethics does not rest on the laurels of its achievements but is called upon to respond, each time anew, to the ultimately irresolvable question of how, in thinking and eating, to say ‘yes’ to plants.
Notes

3 The first and the last two paragraphs of this paper are based on my article ‘If Peas Can Talk, Should We Eat Them?’ published in The New York Times (April 29, 2012), p.9 earlier this year.
5 The problematic assumption that the concept of personhood can be extended to plants underpins Matthew Hall’s recent book, Plants as Persons: A Philosophical Botany (Albany, NY: SUNY Press, 2011).
7 Aristotle, De Anima, 413b, 1–10.

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