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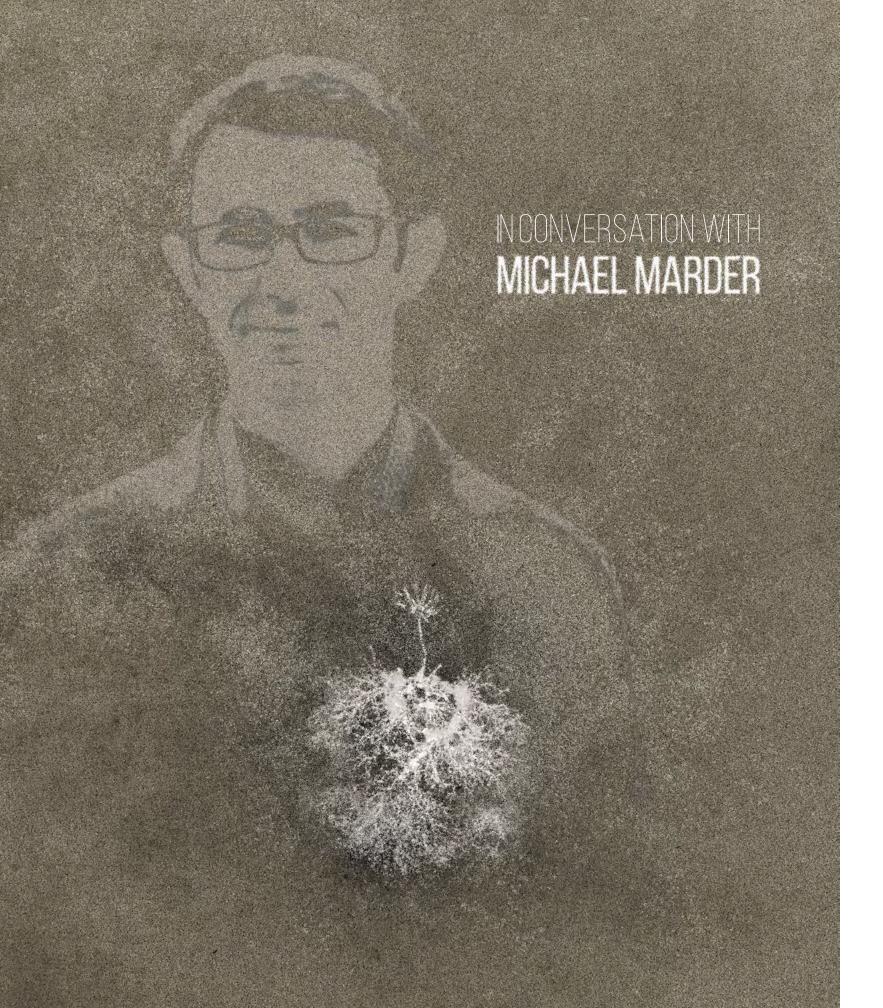




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Since the publication of Peter Singer's *Animal Liberation* in 1975, animals have been repositioned and reevaluated as sentient beings in both the sciences and the arts. It is only recently, however, that plants are being similarly appraised. Under the rubric of "critical plant studies," philosophers such as Michael Marder are challenging the ways in which plants have been historically (mis)understood and exploited, opening doors to ideas and feelings about our relationship to the world around us that question human identity at the deepest levels. Since plants and our relationships with them are a primary focus for landscape architecture, it would seem important that the discipline be aware of this rapidly emerging literature that seeks to now understand plant life on its own terms. But what are those terms and how can we possibly know them? To explore this conundrum **Richard Weller** spoke to Michael Marder, author of numerous books on the relationship between philosophy and plants including *Plant-Thinking: A Philosophy of Vegetal Life* [2013].

+ Critical plant studies is predicated on the problem of Aristotle's Scala Naturae. where plants are ranked below animals, which in turn are ranked beneath human beings. Plants are positioned literally as low life: immobile, mute, and mechanistic. In this regard, the literature of critical plant studies seems to have two interrelated agendas: first, to work through plants to deconstruct this hierarchical philosophy of science; and secondly, as I understand it, to champion plants as subjects not objects, beings not things. As a leading thinker in this area, is this a fair characterization of what is meant by critical plant studies and is this more or less your philosophical project?

+ Lynn Margulis wrote that the "different wisdom" and evolutionary success of plants lies in their fundamental microbial technologies. In other words, if we are to think like plants we are really trying to think like—or at least imagine the origins of—life itself. Is that the direction of your thinking with plants?

Indeed, what you describe is the shape my philosophical project assumed in the first book I wrote about plants, namely Plant-Thinking (2013). My goal there was, as you note, two-fold: to unsettle the traditional (philosophical, anthropological, scientific) view of plants as barely living, utterly passive beings, and to reimagine vegetal existence as endowed with its world, temporalities, freedom, and wisdom. Since then, both my philosophy of vegetal life and the field of critical plant studies have grown more ramified, branching out in different directions, and concerned especially with the ethical and political implications of the so-called "plant turn" in the humanities. Still, I would be reluctant to declare the initial part of the project accomplished once and for all. The deconstruction of metaphysics and of the hierarchies it entails is not a demolition derby; it demands lots of patience and a persistent practice. It is not enough to question, for instance, the unfair evaluation of plants as somehow inferior to animals without, at the same time, turning our gazes inwards and interrogating both the psychic and the physiological configurations of our vegetality, animality, and humanity. A more positive theoretical gesture of interpreting the existence of plants existentially is, by the same token, an open-ended endeavor, just because this existence cannot be described definitively and objectively within a framework that, as you put it, "champions plants as subjects."

Plants are wonderfully collaborative creatures. They collaborate with each other, with microbes and fungi belowground, with insects and other animals, with the elements, such as the wind that carries their pollen, or the solar blaze from which they draw energy. Of course, they have also developed defense strategies that range from poisonous berries to biochemical deterrents of root growth of other species inhabiting nearby patches of soil. But, before projecting markedly human categories—such as "invasion," "war," or "peace"—onto plants, I insist that we need to consider their unique subjectivity and relation to the world. Plants are not possessive, appropriative subjects bent on conquering more and more territory; if they flourish, spread, proliferate, this is not a conquest, given how blurry the lines separating self from other in vegetal existence are. The same goes for the demarcations between the individual and the collective, which we tend to take for granted in a human world and which we subsequently transpose onto other-than-human existence. What plant scientists call "kin recognition" might be the plants' recognition of related

+ Given that the meanings we read into other forms of life always to some extent reflect the anxieties and aspirations of our particular historical moment and cultural context, it makes sense that in the midst of the sixth extinction contemporary thinkers are turning to flora and fauna as philosophical subjects. But as you do this work how do you negotiate the problem of anthropomorphic projection and how do you square that with science and philosophy's commitment to truth?

+ Your work, and that of your colleagues in critical plant studies, leads us into a realm of heightened sensitivity to and respect for the lifeforms we have long exploited. In the first instance this is a philosophical project but can you also speak briefly to the practical and political consequences? Surely critical plant studies doesn't envision a return to Eden but, if so, then what is its better world?

others as themselves, while their own organismic assemblages exhibit a very loose integration, capable of separation without irreparable harm inflicted either on the separated members or on the collectivity, from which they are detached. Probing further this line of thinking, we can try to move past some of our most entrenched anthropocentric biases, without, simultaneously, falling into the trap of an abstract and, frankly, undifferentiated thinking of life "as such." That is why in a 2014 paper I proposed the term *phytocentrism* as an alternative to *zoocentrism* and *biocentrism*, alike. My argument, in that paper and related writings, including my 2016 book *Grafts*, is that plants are singular universals, that is, singular living beings who point toward and, to some extent, encapsulate the universality of life. In rhetoric, there is a word for this kind of representation of the whole by its part: synecdoche.

Although I've already touched upon the problem of anthropomorphic projection in my answer to your previous question, a lot more can be said about it. My goal is not to ascribe human qualities to plants but, on the contrary, to produce an estrangement effect within ourselves by acknowledging the repressed elements of vegetality in us. The persistence of the vegetal principle of vitality—the Aristotelian to threptikon in all forms of life, be they plant, animal, or human, is one path toward such an acknowledgment. Another is the vegetalization of our individual and collective bodies. In this sense, the skin is our most vegetal organ, breathing on the surface through its pores, sensitive to light, temperature shifts, and humidity gradients, "listening" by way of receiving vibrations on its surface. Dry, dead skin flakes and falls off, without causing us much harm. How is it different from a leaf? And our political and technological bodies, too, are vegetal, if you take into account the decentralization of authority, the multipolarity of power, the networked, ramified, or rhizomatic character of human assemblages. Learning from plants will only be possible on the condition that we hold in check the pervasive temptation to project and anthropomorphize. This, in fact, has been a constant of my work with plants: not to obliterate their difference both outside and with ourselves. For, what can we really learn from a shadow image or a mirror reflection of ourselves?

When I say that we ought to recognize the consequences of vegetalizing our individual and collective bodies. I have in mind, in the first instance, the practical and political effects of such vegetalization. To take the political sphere, nearly 10 years ago, I wrote a brief analysis of the Occupy Movement, signaling that there has been a shift from the animal-organismic model of political protest to a more vegetal model: participants in Occupy did not march in the streets, but stayed put in a spot, almost rooting themselves in it. The movement then grew and decayed in a decentered way, both locally and globally, flourishing in parts, while at the same time declining in others. However, such vegetal politics is not only the ideal (and, increasingly, the practice) of anti-capitalist resistance. For all the intellectual animosity, widespread on the Left, to sovereignty and centralized authority, these are not today's enemies; we conjure them up, at best, from the day before yesterday. Anarchic plant-inspired resistance to the consolidated organization of an animal-like totality is nothing but an illusion. Without knowing it, establishment politics, too, is vegetal - hylomorphic, mutable, not directly oppositional, modular, anarchically growing, and decaying. The clash is taking place within the folds of vegetality, which is, with the mediation of the image of the network or the web, imperceptibly defining our idea of being as such. That said, plants can, in very concrete ways, point toward a better world. For one, the stifling nature of the collective pressure on individuals is overcome on the terms of vegetal singular multiplicities. For another, our dietary habits may be ethically improved not only if we incorporate more plants into our diets, but also if we learn from plants the meaning of eating with the least violence possible, tapping into the generously self-regenerative character of vegetal existence. Philosophically speaking, these nutritive principles + It seems to me that you are asking us—and helping us—to take extraordinary leaps of imagination and that this is preparing the ground for different ways of being in the world. If so, then in common parlance one might say yours is both a spiritual and an ecological project. How do those two key words sit with you?

extend beyond the world of plants – most importantly, to lab-grown meat, in which animal cells no longer proliferate as they do in a complete organism. So, to sum up, the political and practical implications of plant-thinking are virtually inexhaustible, but they do not always lead to an ideal situation of "Paradise regained," since the current world of networks and decentered power structures is already vegetal. As it often happens, a radical change has taken place, and the point is to spot it and to draw the right conclusions from it.

I am inclined to welcome these words-spirituality and ecology-provided that they are taken in a very rigorous sense. Concerning spirit, I would say that, for me, it is nothing spiritual, that is, nothing ethereal, purely abstract, elevated. Rather, to put it bluntly and perhaps a little cryptically, spirit is matter's relation to itself. It is for this reason that I am drawn to two German thinkers who seem worlds apart: St. Hildegard of Bingen and G.W.F. Hegel. I have just written a book on each of them, more exactly, on the former's ecological theology and on the latter's conception of energy. And your question makes me realize that these studies, titled *Green Mass* and *Hegel's Energy*, revolve, in different ways, around the brief quasi-definition of spirit I have just given you. Hildegard locates the entire canon of Judeo-Christianity in the materiality of plant existence, as she analogizes the Holy Spirit to a flaming root, Mary to the greenest branch, and Jesus to a radiant flower blossoming on that branch. She also makes the inverse move of situating vegetal life at the core of the creation and continual recreation of the world. The ecological fold, where the highest spiritual and the lowest material realities meet and where they receive their sense from that encounter, is viriditas - Hildegard's signature word, which is the Latin for "greenness" (or, as I've translated it, "the greening green"] and which stands, more broadly, for the freshness and the self-refreshing character of existence.

Hegel, in his turn, understands by spirit (*Geist*) the preserving, determining, and elevating self-negation of each thing, initially misrecognized as absolutely other (nature) or readily acknowledged as an outcome of human industry (culture). That is to say, spirit is the self-relationality of matter, and the more intensely matter relates to itself, by negating and elevating itself, the richer, the more determinate it becomes. What fascinated me in Hegel's thought was how his conception of spirit dovetailed with energy, conceived not as a pure potentiality that may be extracted from everything that is, but, on the contrary, as actuality (*Wirklichkeit*) and the process of actualization. My study of Hegel revolves around this dialectical notion of energy. In his *Philosophy of Nature*, Hegel admittedly attributed to plants a nascent subjectivity still largely devoid of self-relationality. This is a serious blunder, given the notion of spirit as matter's relation to itself. But he more than compensated for it when, for instance, he pictured the entire process of the development of spirit on the model of plant germination, growth, blossoming, and decay.

+ The Chernobyl Herbarium—an exquisite book that interleaves your writing with rayographs of plants from the exclusion zone by artist Anaïs Tondeur—suggests that you are interested in aesthetics and collaborations with artists. Are you currently working on or planning any artistic collaborations?

Green Mass, the book on St. Hildegard of Bingen I have already mentioned, is actually a collaboration with Swedish celloist and composer Peter Schuback. The title of the book is purposefully ambiguous: in English, "mass" can refer to liturgical Church service or to the sheer weight of things. I like this word for its capacity to gather into itself the most spiritual and the most material connotations in a unique blend we've just discussed. But, from the outset, when I barely started nurturing the idea of the book, it was clear to me that the project would be impoverished without a musical component, not only because it would be robbed of the sonorous connotations of a mass, but also because music and musicality (in a sense that is quite cosmic) were so cherished by Hildegard herself. I was overjoyed with Peter's acceptance of my invitation to collaborate. We discussed the threads of my philosophical engagement with Hildegard, and Peter did an amazing job of composing the score of *Green Mass*,

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Linum usitatissimum Byrsonima lucida

Linum usitatissimum Linum strictum

The Chernobyl Herbarium by Anaïs Tondeur (2011–2016), 24 × 36 cm pigment prints on rag paper. These rayographs were created by the direct imprint of plant specimens from a radioactive herbarium in the Chernobyl Exclusion Zone, Ukraine, on photosensitive plates. Radiation level: 1.7 μSv/h.

which resonated with the themes of my text, on the one hand, and Hildegard's musical heritage, on the other. So, the book's chapters share their titles with the main movements of Peter's compositions, even as his "Composer's Notes" elucidate the relation between textual and musical elements. The publisher, Stanford University Press, will integrate images of the score into the book and will make the link to the musical files available on a dedicated webpage for readers to enjoy this joint effort. In addition, I continue collaborating with Anaïs Tondeur on two projects. One is The Chernobyl Herbarium, which turned out to be an ongoing adventure. After its original publication in 2016, we've continued marking each subsequent anniversary of the Chernobyl disaster with a new rayograph and textual fragment. For the 35th anniversary this year, a Spanish edition of the book is being prepared with these additional materials. The other work we have been developing over the past years is an attempt to reinvent the very shape of an artist-philosopher collaboration (the method, if you will) by following plants. Schematically speaking, we strive to adopt a vegetal way of being, or of becoming, and to let it quide our respective practices converging around this common theme. I would go so far as to say that the insistence on collaboration as a fundamental feature of plants in my response to your earlier question and in this brief report about my recent work with artists is not accidental. The collaborative act-assuming that we begin to comprehend all the synergies, modalities of work and play, complicities, complexities of engagement, and so on that it involves—is highly indebted to plants. When I started working on them, I quickly realized that this work is only worthwhile if I work with them. But this "with-work" (which is the literal translation of Greek-based synergy and Latin-inflected collaboration) does not impose strict limits on who or what it is that one is working with. Various collaborations with plant scientists, philosophers, and artists are, therefore, of a piece with our collaborations with plants.

+ Speaking of philosopher-artist collaborations, I'm reminded of Jacques Derrida working with the architects Peter Eisenman and Bernard Tschumi on a concept for a garden within the Parc de la Villette in Paris. But not only that, the entire history of gardens is richly imbricated with philosophy. Are you interested in landscape aesthetics and garden design, both historical and contemporary, in relation to plant-thinking?

Definitely. I had a chance to reflect on gardens and philosophy in *The Philosopher's* Plant (2014). A royal garden is the setting for the chapter on Leibniz, in which I also discuss, among other things, the Leibnizian concept of matter as "a garden within a garden within a garden." More recently, I penned an essay for the British online magazine, The Learned Piq, titled "The Garden as Form." Precisely as instantiations of a philosophico-architectural form, I find gardens problematic. In their very concept, they entail an enclosure, within which, as I write in that piece, "the most diverse beings are primed for appropriation." Approached uncritically, gardens offer ample opportunities for taming, domesticating, and managing whatever remains of nature. Gardening (and, perhaps, garden design) then becomes indistinguishable from what I call *quardening*, keeping a piece of the vegetal and animal world within clearly enforced, or at least enforceable, limits. Besides the fact that these have been my philosophical engagements with the topic thus far, there is a deeper reason for juxtaposing the Leibnizian view of garden as matter and the idea of garden as form. I think that landscape aesthetics and garden design can strive, in a plethora of ways, to deformalize this form, which we like to impose onto vegetation and onto other kinds of life. Rewilding may be one outcome of such an exercise, but it is by no means the only one. What I find particularly interesting is that the infinity, which Leibniz factors into his notion of matter, makes the task at hand equally infinite. At both extremes of matter and form, we encounter a garden, which means that they are not quite the disarticulated extremes we take them for: matter reaches us replete with its forms, and form is always variously mattered. The deformalization I have in mind, then, does not aim at something like pure matter, but at the infinity of forms that matter gives to itself, for instance, as a garden. The question is: how can the confines of a crude, "imposed" form be relaxed so as to allow gardens within gardens within gardens to flourish? How can gardening persist without being constantly on guard against potential intruders (the unwanted species and shapes of growth), without policing the limits of a plot of land and of our idea as to what this plot should look like?

+ When you were speaking earlier about your collaboration with a musician for *Green Mass*, I wondered what you thought of the recent event where the UceLi Quartet played Puccini's *Chrisantemi* (Chrysanthemums) to an audience of 2,292 plants in Barcelona's Gran Teatre del Liceu, following which the plants were distributed to healthcare workers?

To be honest, I had mixed feelings about this event. The photographs of the Gran Teatre del Liceu were gorgeous, with plants occupying all the seats. Visually, the contrast between gilded balconies and ceilings, the bright red of the carpets and the stage curtains, and the green audience was guite powerful. But I also felt a sense of unease. Plants were put in the role of spectators, uninvolved in what was happening on stage. How is that different from using them as props? In fact, it seemed that the entire theater was converted into a set with 2,292 vegetal elements. The concert was not intended for the plants; it was broadcast online for a human audience. Plants were, once again, used as means, through which organizers wanted to make their point about how the COVID-19 pandemic brought us closer to nature. (I actually think that the pandemic had the opposite effect of exacerbating all kinds of alienation, from the economic to the interpersonal, not sparing our relation to plants and animals, either.) And this is not even to mention that, for the most part, human spectators themselves are reduced to caricaturized plants: passive, separate from the action, silent and immobile until the final applause. So, it was not a big stretch to replace people with plants. For a much more radical and innovative proposal to put plants on stage no longer as mere props and to vegetalize a human actor, I would recommend Manuela Infante's play Estado Vegetal ("Vegetative State").

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