

Sympoietic Art Practice in Co-expressive Re-worlding with Hegel's "Vegetal Subject"

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Abstract

"Sympoietic art practice", construed as co-creative making-together-with plants, contributes to posthumanist discourse by forming cross-species partnerships which re-configure exploitative relations with plants. The posthumanist commitment of sympoietic practice to live equitably with the more-than-human world is inherently opposed to the tradition of anthropocentrism widely associated with Hegel's idealization of reason and culture. But when Hegelian philosophy comesling with the radically different assumptions of sympoietic art practice in this exploratory paper, a co-expressive "worlding with plants" emerges. A transformative re-reading of Hegel's Philosophy of Nature reveals that the English translators have smoothed away the vibrant concept of a "vegetal subject" explicitly used by Hegel in the original German. The resulting interpretive fissure makes space for a creative scrutiny of human exceptionalism, humanist and posthumanist conceptions of plant subjectivity and human-plant relations. Our transdisciplinary article concludes with a performative knitting together and composting of shreds of Hegelian text with vibrantly participative strands of living couch grass.

Keywords: *Co-creativity; Hegel's Philosophy of Nature; Plant-human relations, Plant subjectivity; Sympoietic art practice*

Introduction

Posthumanist appeals for radically new forms of co-operative action with the more-than-human world stem from inadequate political and technological responses to the anthropogenic crisis of global warming, pollution, and widespread destruction of habitats (Braidotti, 2013, 12, 190). The alleged higher purpose of the human species, associated with the humanist tradition, has created a disconnection between humans and nature which is now held responsible for the devastating exploitative activity and serious anthropogenic environmental consequences known as the Anthropocene (Alaimo, 2016).³ In view of the widely recognised correlation between attitudes towards nature and environmental action (Klein, 2014), the time is ripe for co-creative research to explore fresh ways of relating to plants, a marginalized life-form which nevertheless constantly maintains the conditions essential for a flourishing planet.⁴

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³ The term Anthropocene, proposed by Crutzen and Stoermer (2000), is now widely accepted as the geological age of humanity's global impact. However, posthumanists question this aggrandizement of "man", especially at a time when humans are failing to curb their destructive behaviour (Alaimo, 2016; Demos, 2016, 2017).

⁴ David Attenborough (2020) stresses the importance of plants and the extent of anthropogenic damage.



In this paper, we report on a provocative “worlding with plants” which emerged from the authors’ disparate research interests and practices. We interweave strands from Hegelian philosophy, sympoietic art practice and critical plant studies with the aim of collectively provoking alternative viewpoints to the conventional, normalizing rhetoric about plant passivity and human centrism. Michael Marder’s *Plant Thinking: A Philosophy of Vegetal Life* (2013), a seminal work in critical plant studies, critiques the traditionally privileged position of humans in relation to plants and argues for a new respect for the vegetal (Stark, 2015). Thus, critical plant studies provide a theoretical posthumanist starting point and channel for our unlikely liaison between Hegel’s theory of nature and the radically different assumptions of sympoietic art practice.

Marder stresses the need for a change in human-plant relations: “...to cultivate a way of thinking not only *about* plants, understood as epistemic or moral objects, but also *with* them and, consequently, *with* and *in* the environment, from which they are not really separate” (2013, 181). This is essentially the remit of sympoietic art practice, which extends to actively working co-creatively with plants as well as thinking with them. The experiential thinking-by-doing characteristic of sympoietic art practice is inherently opposed to the philosophical objectification of plants associated with Hegel’s anthropocentric idealization of reason and culture in opposition to nature. Nevertheless, we argue that giving our attention to multiple, even conflicting models, can deepen an understanding of plant subjectivity and provoke a transformative shift in attitude. In this paper, we allow human voices to mingle and learn from the much quieter presence of plants themselves.

Marder also refers explicitly to the work of Hegel. He points out the value of traditional Western philosophy as a sounding board for future plant-thinking:

[...] on the fringes of Western philosophy and in its aftermath, surprisingly heterodox approaches to the vegetal world have germinated. The import of external critiques of metaphysics is undeniable. But if a hope for reversing the philosophical neglect of plants in the West and for overcoming the environmental crisis of which the neglect is a part is to stay alive, immanent (internal) criticism of the metaphysical tradition must become a *sine qua non* of any reflection on vegetal life. (2013, 6)

Our rationale for co-mingling Hegel’s philosophy with sympoietic art practice includes a discussion of the background and ethical implications of sympoietic practice, which we contextualize within posthuman discourse and ecological art. This is followed by an analysis of Hegel’s vegetal subject. We argue that intellectual understanding gained through the attempt to work co-creatively with plants drives a re-examination of historically established attitudes towards plants, particularly in terms of plant subjectivity and plant agency. To avoid reinforcing the anthropocentric narrative of human exceptionalism which may unintentionally leak into practice, it is necessary for co-creative artists to recognize the mesh of historical influences which have shaped present-day attitudes (L. Charlston, 2019). Thus, a dynamic interface between Hegel and sympoietic practice can defy the rigid interpretations of historical philosophy which influence contemporary discourse and hinder urgently needed transformative practices. The paper culminates with a performative, transdisciplinary knitting together and composting of these strands in a radical form of co-operative action with the more-than-human world.



Sympoietic art practice with plants in the context of posthumanism

Sympoietic art practice with plants was first proposed and developed by Lin Charlston in her doctoral thesis (2019). The thesis explores co-creative enactments of walking, growing, and making together-with plants in the light of new materialist conceptions of agency and posthumanist ethics of non-exploitative, egalitarian practice. In order to accept plants as co-gential partners, a radical shift is required from human-centrism towards a more equitable, cooperative relationship with plants. Theoretical support for a sympoietic art practice is found in posthumanist positions (Barad, 2007; Braidotti, 2013; Haraway, 2016) and critical plant studies (Marder, 2013). An emerging field with similar agendas to critical animal studies, critical plant studies raise questions about human privilege with respect to plants from multiple perspectives and is accordingly part of the wider posthuman turn. Sympoietic art practice also draws on recent developments in the study of plant intelligence (Mancuso, 2018; Trewavas, 2015).

As an ecologically situated practice, sympoietic art has roots in the field of ecological art (Demos, 2016; Weintraub, 2012). However, the specific remit of working co-creatively with plants brings with it multiple implications for the sympoietic practitioner and necessitates changes to the traditional plant-artist relationship (L. Charlston, 2019). While sympoietic art practice is a way of working rather than a particular art form, there are many artists who display aspects of sympoiesis in their practice. To take just one example, ecological activist and artist Basia Irland puts egalitarian art into practice in her worldwide series *Ice Receding/Books Reseeding* (2007-2017). Irland carves books from blocks of frozen river water imbedded with local seeds. Local communities participate in placing the seeded ice books back into fast flowing rivers to disperse and re-vegetate riverbanks as the ice melts. Irland's performative, non-invasive work embraces ecological situatedness, ethical considerations and collective participation.

The key theoretical term "sympoiesis" was introduced into contemporary discourse about ecological systems to describe the activities found in "collectively produced, adaptive systems" (Dempster, 2000). By contrast, the more established theory of autopoiesis describes processes in living systems as autonomous, closed and self-maintaining (Maturana & Varela, 1980). Haraway aptly interprets sympoiesis as "making together with" and "worlding-with, in company" (Haraway, 2016), a reminder that we make sense of the world through creative interchange and shared experiences. Crucially, then, sympoietic art practice remains conceptually ajar so that artistic experiences, shared with plants and other participants, can generate collective knowledge. Practical manifestations of sympoietic art inform naturalcultural understandings of plants in which nature and culture are seen as deeply inter-dependent.

Despite artistic efforts to work more equitably, co-expressive activities frequently encounter cultural effects which interfere with the perception of plant subjectivity. The aesthetics of anthropomorphism, representation, symbolism, and commodification of plants require renewed scrutiny in the light of posthuman practice to further a shared critical awareness of plant subjectivity.⁵ For example, while likening plants to humans may help us to identify with

⁵These insights assist Lin Charlston's shaping of "plant de-coherence", a novel conceptual basis for exploring and nuancing an understanding of cultural interference in the high contrast plant-human interface where relational exchanges play out (2019).

plants, it may also obscure plants' vegetal nature, wider relationality, ecological situatedness and agential potential.

The imperative for sympoietic art practice is that plants are encouraged to participate actively in co-creative and adaptive processes. But this radical shift to accepting plants as agentially-active partners in art practice includes a refusal to view plants as passive and helpless thus demanding a posthuman ethical stance towards the vegetal (Marder, 2016, 159-163; De la Bellacasa, 2017). Mindful of the suppression of plants through commodification and objectification for aesthetic enjoyment and economic gain, sympoietic practice strongly embraces the posthumanist ethic of non-exploitative dealings with plants, welcoming plants as equal subjects in the processes and products of artistic practice. Furthermore, the new materialist understanding of agency provides a basis for mutual plant-human agential relations by disputing the traditional philosophical view that agency is confined to human intentional acts imposed on matter. By contrast, a single subject is no longer identified as the source of an effect (Bennett, 2010). In Barad's account of mutual intra-action and mutual response, all matter is considered to be actively agential in a relational process of becoming (Barad, 2003, 818).

In terms of sympoietic practice, it is through touch, smell, and a combination of sense and sensibility in shared experiences with plants that we begin to encounter philosophical concepts like the vegetal subject and plant agency. Growing plants as a sympoietic artist is a protracted tactile encounter with plants quite different from eating or admiring them, which exemplifies this compelling recognition of vitality. Co-operation with plants as they grow is both transitive and intransitive growing: I grow the plant, the plant grows. The processes merge and interchange as a kind of mutual becoming which defies rigid distinctions between growing and making. When we do the growing together, artist and plant, a sense of growing connectivity changes plants into agential plant subjects, in a shared world. However, sympoiesis does not end with this cozy culturizing of the plant. Of all sympoietic practices, sharing growth processes with plants is the most intimate but at the same time the most ambiguous in terms of relationality, and the most demanding of commitment, ethical responsibility, and care. Forms of domination, such as a tacit sense of ownership may diminish the independence of the plant subject, which naturally grows by itself without any human assistance. Caring intentions may inadvertently disrupt the plant's ecological networks. Nevertheless, plants are not passive recipients of my agency, they are vibrant, actively living, growing, and responding in a way that is beyond my control. With trust in the vegetal subject, one could speculate that seedlings express an agential will to live when they sprout and grow, and the plant becomes an agent of change capable of influencing my actions. In this sense, growing-with-plants can be understood as mutual expression, a co-agential exchange.

In this paper, co-creative purpose also drives our affirmative scrutiny of humanist and posthumanist conceptions of plant subjectivity. We investigate human-plant relations by bringing the perspectives of sympoietic art practice and Hegelian philosophy together in a co-creative dialogue. Our transformative plant-friendly re-reading of a key passage from Hegel's *Philosophy of Nature* takes the historical discourse beyond a humanist-dominated objectification of plants. The discovery of a hitherto under-recognized Hegelian "vegetal subject" opens an interpretive fissure in which to engage with the cross-species partnership found in sympoietic practice. The imaginative comingling of sympoietic art practice with Hegel's "vegetal subject", which drives the paper, thus leads sympoietically towards a co-expressive manifestation of



this liaison—a physical knitting together of grass with Hegel’s text. But first, we must give more attention to plants.

Hegel considered the uncontrolled growth of plants as one of their many limitations. Plants lack movement, they cannot determine their place. Their parts are not fully subservient to the organism as in the case of superior animals with a brain, functionally differentiated organs, and a central nervous system:

The process of formation and of reproduction of the *singular* individual in this way coincides with the process of the genus and is a perennial production of new individuals. Because the selflike (*selbstische*) universality, the subjective One (*Eins*) of the individuality, does not separate itself from the real particularization but is only submerged in it, so that the plant is not yet a self-subsistent subjectivity over against its *implicit* organism, therefore it can neither freely determine its place, i.e. *move from the spot*, nor is it for itself, in the face of the physical particularization and *individualization* of its implicit organism (Hegel, 1970a, 305).

By contrast, the idea of a sophisticated plant intelligence is supported by contemporary plant science, although the ethical implications are not always fully recognized (Trewavas, 2015, 1). Stephano Mancuso, director of the International Laboratory of Plant Neurobiology, reverses the Hegelian elevation of animals and humans. Mancuso sees the centralized control of the brain as a fragile, archaic model “whose only advantage is to provide quick responses” while the modular, diffused structure of plants is both stable and flexible, “the epitome of modernity: a cooperative, shared structure without any command centers” (2018, xi). One might consider that individual plants are subservient, not to the autonomous individual organism, but to the collective whole, which is arguably an advantage rather than a limitation. Intelligent behavior is construed as problem-solving ability rather than the ability to reason with a brain: “by this definition plants are not just intelligent but brilliant at solving problems related to their existence” (Mancuso & Viola, 2015, 138).

After spending many hours observing the movements of plants for his final book, *The Power of Movement in Plants* (1880), Charles Darwin likened the root-tip of a plant to a brain:

[...] the tip of the radicle [...] acts like the brain of one of the lower animals, the brain being seated within the anterior end of the body, receiving impressions from the sense organs, and directing the several movements (Darwin, 1880, 573).

At that time, Darwin’s “root-brain hypothesis” was widely ridiculed. The flower, through its eye-catching role in reproduction and display, was considered the principal part of the plant. However, recent research supports Darwin’s discoveries: “the root tip is even more advanced than Darwin imagined, able to detect numerous physiochemical parameters in the environment” (Mancuso & Viola, 2015, 130).

The root tip “brain” serves more than the individual plant by connecting with other plants in a mycorrhizal network under the ground to form a collective brain. This resonates with the collective, adaptive endeavors of sympoietic art practice, changing the emphasis in our understanding of plant subjectivity from the lack of individual, brain-centered subjectivity which Hegel envisaged, to a collective subjectivity in co-creative worlding. With the help of posthumanism and contemporary plant science, the attempt to work co-creatively with plants in sympoietic practice repeatedly supports the notion of distributed plant-selves and

a kind of extended subjectivity shared between plants. Hegel's firm belief in the superiority of the central human "reasoning" brain made it impossible for him to develop his concept of a "vegetal subject" in this direction, which indicates just how revolutionary his suggestion was at the time.

Listening with limits: Hegel's humanist account of plants

Hegel's philosophical system, published in German in the first decades of the nineteenth century, comprises three interconnected parts: Logic, Nature and Mind (Houlgate, 2005). In the *Philosophy of Nature* (Hegel, 1970b), Hegel develops traditional Aristotelian views about the natural world with reference to the science of his own day. The *Philosophy of Nature* systematizes the cosmos, the physical, chemical, and biological world (including plants) to show the close connection between the rational workings of logic and the rational workings of nature (Houlgate, 1998; Stone, 2005). In the next paragraphs, we outline Hegel's discussion of plants selectively to contextualize our subsequent artistic intervention.

Hegel's ultimate elevation of human culture over nature, which marginalizes plants as a low, unfeeling life form, was never his own invention; it is historically embedded in Western thought. Aristotle's hierarchical classification of living things considered plants to be merely living, growing matter. Indeed, until recently plants have been regarded as self-less in Western cultures (Nealon, 2016, 68). Plants helplessly respond to given conditions while humans dominate the world through their exceptional human agency. Such historically embedded, anthropocentric starting points work insidiously, through linguistic, cultural, and artistic conventions, against the possibility of plants as subjects, let alone plant subjects as active agential partners in art practice.

Hegel's analysis of plant life in *Philosophy of Nature* goes beyond the ancient Greek, essentially hierarchical view of plants, because for Hegel, plants and "lower" organisms have the beginnings of spirituality and subjectivity which emerge more fully in animals and humans through evolution (Stone, 2005, 51). Hegel does not develop this aspect of his discussion of plants further, but, as we shall see, modern reinterpretations of Hegel, see promising metaphysical potential in Hegel's suggestion of a vegetal subjectivity. For the most part, in Hegel's account, plant subjectivity exists at the level of the "universal", while individual plants only share a small, undeveloped fragment of the spirituality embodied in their species (Hegel, 1970a, 305; Stone, 2005, 50). Taken broadly, Hegel's hierarchical, anthropocentric system of philosophy therefore supports the historically engrained tradition of human domination of plants and widespread disregard of their role as co-habitants.

Passages, in which Hegel emphasises the limited development of plants by comparison with animals and especially humans, are to be found throughout the *Philosophy of Nature*. For example, Michelet's editorial *Additions* explain the sense in which a plant cannot be thought of as a self with agency: "Thus air and water are perpetually acting on the plant; it does not take sips of water" (Hegel, 1970a, 308). Plants are portrayed here as passive and contrasted with animals which are capable of "sipping" rather than merely being acted upon.

Hegel's *Philosophy of Nature* was long ignored, first translated into English only in 1970, and widely cited as an example of humanist thought at its most patriarchal, misogynist and essentialist. However, such classifications are an oversimplification (Houlgate, 1998, xxv-xxvi). Detailed scholarly engagement with his understanding of plants is still emerging (Stone,



2005, xi-xx).⁶ Seminal research in the 1990s drew attention to the exaggerated criticism Hegel's book had received for its allegedly unscientific claims (Houlgate, 1998; Petry, 1993).⁷ Taken superficially—as bad science rather than as a philosophy of nature—it had seemed merely to reproduce a heteronormative binary between a primitive, untamed nature and a rationally sophisticated, Western European, colonial, and patriarchal culture.

In an important re-reading of Hegel's *Philosophy of Nature*, Stone (2005) differentiates Hegel's position on natural forms from the science of his day as follows: "For Hegel, the central assumption underlying [conventional] science is that natural forms are bare things. In contrast, his [Hegel's] own metaphysical view is that natural forms are (in a certain qualified sense) rational agents, which act and transform themselves in accordance with rational requirements" (Stone, 2005, xii). Stone concludes her re-reading of Hegel as follows: "We can, and should, rediscover Hegel as a thinker who seeks to recognize agency, rationality, and intrinsic value in nature, and who therefore has a significant contribution to make to the contemporary task of reappraising the metaphysical and ethical status of the natural world" (2005, 170). In the years since Stone came to this conclusion, pro-Hegelian scholarship (Gambarotto & Illetterati, 2020) continues to defend the *Philosophy of Nature*, arguing, for example, that a deeper understanding of his metaphysics reveals a potentially plant-friendlier Hegel. Marder also points out that Hegel does not claim that plants are devoid of selfhood, but concedes a limited selfhood even to plants (2013, 70).

Posthumanist thinkers and recent Hegelian philosophers agree that Hegel's thoughts about plants are still relevant and worth discussion. If Hegel's philosophy can provoke a change in attitudes towards plants, it deserves an affirmative and transformative re-reading in posthumanist terms. In this spirit, the present paper engages with the complexities of plant-human relations through a sympoietic, artistic transformation of Hegel's limited humanist vision of a "vegetal subjectivity" into a posthuman "vegetal subject".

For this paper, we compared the relevant part of Hegel's German text with the two published translations (Hegel, 1970a, 303-350; Hegel, 1970c, 45-101). The comparison showed surprisingly that Hegel not only refers repeatedly and emphatically to plant subjectivity, but in the German text, he even uses the singular adjective and noun *vegetabilisches Subjekt* (Hegel, 1970b, 371) suggesting the possibility of an individual "vegetable" or "vegetal" subject. This small but important detail has for a long time been obscured from readers who rely on the available English translations. Most contemporary writers on Hegel and plants, including Marder, dwell on this very passage and on Hegel's discussion of plant subjectivity.

In detailed analysis, both translators avoid a word-for-word translation of Hegel's German phrase *der Prozess der Gliederung und der Selbsterhaltung des vegetabilischen Subjekts*. We translate this literally as "the process of structuring and of self-preservation of the vegetal subject". In other words, Hegel speaks of a "vegetal subject". By contrast, the translators, highly significantly for our purpose, play down the thrilling specificity of this phrase. Miller avoids the phrase *des vegetabilischen Subjekts* altogether, using "the plant" instead (Hegel, 1970a, 303)⁸, leaving the

⁶ J. N. Findlay's *Introduction* to the Miller translation (Hegel, 1970a, v-vii), and M. J. Petry's more extensive introduction and notes to his three-volume translation (Hegel, 1970c) were landmarks at the time.

⁷ These more recent edited books also argue that Hegel was fully aware of the science of his day but, in fact, his own work represents a philosophy of nature rather than an attempt at empirical science. A recent literature review and discussion of Hegel's views on nature is provided by Gambarotto & Illetterati (2020).

⁸ The Miller translation reads: "Consequently the process whereby *the plant* differentiates itself into distinct parts and sustains itself, is one in which it comes forth from itself and falls apart into a number of individuals, ..." [italics added].

reader with a mere plant without subject or subjectivity. Petry introduces a grammatical shift from “subject” to “subjectivity” suggesting that any subjectivity the plant might enjoy is not to be thought of as a quality of the individual plant (Hegel, 1970c, 45).⁹ Additionally, the lexical item “subject/subjective/subjectivity” occurs less frequently in Miller’s translation than in Hegel’s original. The translations thus alter the cohesion of the text at the lexical, grammatical, and conceptual levels. In different ways, both translations push Hegel’s concept of the vegetal subject (Hegel’s *Subjekt*) towards the abstract and the universal (Petry’s “subjectivity”). The translators effectively censor the exciting notion of an individual plant as a living subject more worthy of ethical consideration and mutual respect from humans than might be expected from the kind of narrow human exceptionalism often attributed to Hegel.

We drew on research in translation studies (D. Charlston, 2020; Rawling & Wilson, 2019; Shread, 2019; Walker, 2019), for guidance on how this surprise finding could be used in practice. In recent years, the emphasis of translation studies has shifted from description and criticism of existing translations towards the positive potential of translation as a locus for encouraging social and political change (Flotow, 2011; Flotow & Shread, 2014). Analysis of details of existing, historical translations—especially “shifts” where a translator has made a choice which can be questioned, like the substitution of “subjectivity” for “subject”—can thus be used as leverage, changing the emphasis of how canonical texts such as Hegel’s *Philosophy of Nature* are understood. If previous translators seem to have been faced with a significant choice, subsequent generations can question their choice from a new perspective, such as that of posthumanism, postcolonialism, feminism, ecological justice, etc. In this sense, we take the analysis of the shift between “subjectivity” and “subject” beyond the merely linguistic and beyond misleadingly rigid notions of conceptual accuracy and fidelity to the source-text author. Translation studies research thus shares the co-creative, transformative aspirations of sympoiesis.

Significantly for our purpose, Hegel’s *Philosophy of Nature* evolved from lecture notes 1805-1807, first published in German in 1817, which were originally intended for discussion and transformation by multiple participants, including future generations (Pinkard, 2000, 114-7).¹⁰ Thus, Hegel’s account can be approached as negotiable rather than as a fixed monument of philosophical integrity written by a single, infallible author. The interpretive window on these texts can be left ajar, ideally provoking future engagements. Despite the openness to interpretation suggested by such considerations, Hegel’s precise words in German refer explicitly to a “plant subject” and therefore provide objective evidence of a conceptual tension. We draw on this tension between the fixed elements of Hegel’s German text and the need for continuous re-interpretation in support of the vitally needed change in human attitudes towards plants. While Hegel’s text does not refer to empirical, physical contact with plants, confining his analysis to the metaphysical categories through which plant life develops, the additions by Hegel’s student, Michelet, provide further evidence that Hegel’s classroom discussion included his own and his students’ direct, visual, and tactile, experience of plant behaviors. In one of these additions, Michelet records the following anthropomorphizing discussion of plant movement:

⁹ The Petry translation reads: “Consequently, the process whereby *vegetable subjectivity* articulates and sustains itself, is one in which it comes forth from itself and falls apart into several individuals.” [italics added].

¹⁰ See also the editors’ *Introduction to Hegel’s Philosophical Propaedeutic* on Hegel’s theory and practice of education in (Hegel, 1986, xiii-xxi).



[...] potato-plants sprouting in a cellar creep from distances of several yards across the floor to the side where light enters through a hole in the wall and they climb up the wall as if they knew the way, in order to reach the opening where they can enjoy the light [...] (Hegel, 1970a, 306)

Their young shoots have been searching for long enough in the dark recesses of Hegel's cellar. The time is now ripe for their tirelessly groping subjectivity to be illuminated, and for the seemingly inescapable "as if" which blinds us to what we share with plants to be removed. A posthumanist, sympoietic approach to this conceptual illumination of plants is necessarily cautious and mindful of vegetal ways: "What is required therefore is the cultivation of a certain intimacy with plants, which does not border on empathy or on the attribution of the same fundamental substratum to their lives and ours; rather, like all intimacy, it will take place (largely) in the dark, respectful of the obscurity of vegetal life." (Marder, 2013, 181).

Each new way of thinking about plants as subjects adds complexity, which enriches understanding and provides the conditions for emergent ideas. Mingling the transformative analysis suggested here with sympoietic art practice takes the interpretation a step further, welcoming a plant-friendlier Hegel into the contemporary discourse on plant-human relations. Within the context of Hegel's work, the "vegetal subject" can be taken in multiple ways: as an expression of anthropomorphism, a logical subject, a grammatical subject, or a narrative subject. We suggest that attitudes about plant-human relations can and should be retrospectively transformed through increased attention to details and through focused re-reading inspired and informed by posthumanism. Working co-creatively with plants would be impossible while judging them capable of nothing but helpless growth and reproduction, as suggested by a conventional reading of Hegel's text on plants.

While attitudes are important, the question of how this theorizing of plant subjectivity and plant-human relations manifests in practice must now be addressed. Sympoietic art practice moves the discussion from philosophical theory to plant-inclusive action. This leads naturally to the next and final section, in which we turn to our trans-disciplinary performative enactment of sympoietic art practice where Hegel's words will be knitted together in a co-creative discourse with plants.

"Composting Hegel": A sympoietic knitting of humanist and posthumanist strands

Earlier, we discussed growing-with-plants as a form of artistic production and found it to be undeniably a co-creative, joint enterprise, in which most of the work is done by the plant itself, thus strongly endorsing plant agency, self and subjectivity. In this way, growing plants as art puts into practice suggestions regarding plant subjectivity and plant selves which were glimpsed in Hegel's account of plant nature, and developed further in critical plant studies as multiple accountabilities to plants. The difference between growing plants for food or decoration and growing plants as a sympoietic artist is in the intention and commitment to recognize the plant subject as a companion species rather than an object to dominate. However, enlisting plants for co-creative making is more ambiguous in this respect, as we are about see.

The contradictions of art practice with plants converged in the act of reaching out, with artistic intention, to touch strands of living grass, which we enlisted for knitting our naturalcultural artefact. Bending the plant, altering its "natural" course by working with the living plant as

basic material is an invasive intervention which comes up against all the questions about care, ethical responsibility, and exploitation. When collecting grass for artistic purposes, witnesses are included or excluded, not only in terms of an invited audience but also in the recognition (or lack of recognition) of the grass and surrounding plant subjects as witnesses who might hold us accountable for our actions. The grass itself is already under attack as an invasive weed (Royal Horticultural Society, 2020). This quest for eradication endorses “artistic” removal of couch grass from the garden, but the symptoietic imperative demands hesitation and a circumspect questioning of motives. For our intervention, we therefore resolved to return the grass to the soil where it could continue to grow.

Couch grass grows as long rope-like branching rhizomes with nodes every few centimeters where new roots and leaves can sprout. If the rhizome is cut into pieces, each node can produce a new plant which can then establish a new rhizomatic strand. This rhizomatic capability of couch grass is a model for symptoietic practice: “It has neither beginning nor end, but always a middle (*milieu*) from which it grows and which it overspills” (Deleuze & Guattari, 2014, 22). Similarly, symptoietic practice is situated in time and place, and emerges from what is already there.

We began by tying together long trails of grass to make “yarn” for knitting squares of grass, thereby introducing (arguably elevating) layers of cultural significance, or Hegelian mediation, to the “nature” of the plant. Cultural significance includes attitudes towards couch grass as an invasive weed as well as cultural connotations of knitting: a pursuit for women; grannies knitting cardigans for babies; knitting squares for refugees. When the nature and culture of the grass were looped and linked in the process of knitting, the knotted strands of grass assertively disrupted the regular rhythm of knitting. The straggling leaves and wayward stems interfered with the familiar patterns made by repeated stitches. Organism and artefact merge when a row of text-like stitches is passed from one knitting needle to the other, creating two dissimilar, yet co-dependent sides. As the knitting progresses, the two faces of the artefact re-define each other, neither nature nor culture fully asserted but deeply entangled and co-agential.

We have argued that symptoietic practice provokes a concomitant call to reconsider or re-read historical philosophy as a potential shared resource, a basis for reconstructing the very anthropocentrism with which these philosophers are encumbered. Taking the couch-grass enactment a step further to merge Hegel's *Philosophy of Nature* into an artistic product, we removed the page in which Hegel explicitly mentions the “vegetal subject” and cut it into a thin yarn-like spiral. We conclude our plea for a transdisciplinary approach to the complexities of plant-human relations with a performative knitting together of material strands drawn from symptoietic art practice and Hegel's vegetal subject.

To produce a naturalcultural, co-expressive entanglement of grass with Hegel's text, we made a knitted square with alternating rows of knitted Hegelian text and vibrantly participative but far from submissive knitted couch grass. The intertwining grass and text in the knitted piece embody the bringing together of symptoietic art practice with Hegel's published thoughts on plants (Figure 1). The act of knitting, and the rows of knitted stitches signify a process of translation, re-writing, re-telling the story of nature-culture division which invites an active, more participatory kind of readership. The text-plant relationship in this knitting together goes beyond a humanist-dominated objectification of plants by cutting Hegel's words down to size and finally composting them so that Hegel's printed text will break down and nourish



(and be nourished by) the yet living plant. This sympoietic enactment allows the couch grass to intrude in a previously exclusively human pursuit of self-contemplation, at the same time rendering Hegel's text more porous, less legible, less robust, less confrontational, but more resilient and more capable of co-existence and re-generation. Holes in the knitting mimic the readerly porosity of Hegel's text which was revealed in our analysis, allowing plants to penetrate the very philosophical text in which the becoming of the "vegetal subject" was anticipated.

Figure 1. A co-expressive entanglement of grass with Hegel's vegetal subject



The knitted re-worlding of Hegel's "vegetal subject" is a performative manifestation of our co-expressive collaboration, which embodies the dialogue between disciplines on which this article is based. The climax to our sympoietic enactment confronts cultural norms and presuppositions by bringing Hegel into direct contact with the growing plants. As a final gesture, relinquishing human dominance, we give Hegel up to nature by burying the knitted artefact in the ground. Here, in the "dark cellar" of the soil, Hegel's decaying words will regenerate in the vibrant grass which will grow from the compost. In spring, the green blades will re-emerge into the light, a living revival of the vegetal subject.

This sympoietic enactment was carried out for the first time during the COVID-19 pandemic lockdown. Plants, wild birds and a rabbit were our witnesses (Figure 2). You, as readers of this paper, become an extended, secondary audience who have the potential to stir the compost and continue the creative workings of collective knowledge. New composting enactments are planned, whereby we are knitting further fragments of Hegel's text together with couch grass. These will be sent out for composting in collaboration with artists in different locations. To date, collaborations are planned with artist Pip Woolf (2015-2021) in the Black Mountains of Wales and Emily Artinian (2020) of Street Road Artist Space in

Philadelphia. It is anticipated that the new composting events will be documented and include wider audience participation from humans, but not to the exclusion of attendant plants.¹¹ The spirit of this enactment is aptly expressed by Donna Haraway: “Staying with the trouble requires making oddkin; that is, we require each other in unexpected collaborations and combinations, in hot compost piles. We become-with each other or not at all” (2016, 4).

Figure 2. Composting Hegel – with plants, wild birds, and a rabbit as witnesses



Conclusions

In conclusion, we have argued that, despite Hegel’s evident commitment to humanism, creative energy can still be drawn from his analysis of plants in support of our posthumanist position. Our mingling of strands from symptiotic art practice, critical plant studies and Hegel’s account of plants inspired a physical knitting together and posthuman composting of Hegel’s work in co-creative and fertile participation with plants. The shared enactment serves as a reminder that verbal monuments constructed by Hegel and other philosophers in their printed books are human products which must ultimately be recycled as biomass. Our cross-species, trans-disciplinary, co-creative partnership breaks away from the ethical impasse of human-centrism, thus offering an alternative to current exploitative relations with plants. Such co-operative dealings change the relations between artist, plants, audience, and other participants, temporarily interrupting human denial of plants as co-habitants and opening new conceptual perspectives on artistic appropriations of the vegetal world.

¹¹ The progress of the continuing “Composting Hegel” events can be followed by visiting www.streetroad.org/compostinghegel



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