

Education *qua* Ecognosis:
 Reading Thomas Hardy's *Tess of the d'Urbervilles* for an
 Ecological Philosophy of Education

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Introduction

It might be through art and narrative that we come to learn the hardest truths. This is perhaps why ecological philosopher Timothy Morton uses the arts in order to discuss the baffling complexities of ecological awareness. In what follows we would like to propose that institutionalized education pick up Morton's cue by drawing from the canonical literature already appearing on readings lists in school curricula in an effort to both *invoke* and *provoke* discussions about the nature of human and nonhuman coexistence. Our aim in this effort is to build bridges between disparate fields of study and between theory and practice for the continued development of an ecological philosophy of education.

Accordingly, this paper will consist of three parts. In the first part we will briefly describe and synthesize some of the salient features of Timothy Morton's ecological aesthetics—known as *dark ecology*—for philosophy of education.¹ We will do this in tandem with his *ecognosis*—the attunement structures or epistemic conditions within dark ecology—as it relates to *agrilogistics*—the twelve-thousand-year old agricultural algorithm driving the Sixth Mass Extinction in which we are embedded. In the second part, we will use Thomas Hardy's *Tess of the d'Urbervilles* as an exegetical case study for illuminating the early manifestations of agrilogistics. In the third and final part of this paper, we will attempt to speculate the conditions of an ecological philosophy of education

in the mode of interdisciplinary bridge-building not as a matter of curricular *content* per se but of *form*. Here we are following Maxine Greene in allowing literature to aesthetically shape our educational imaginaries with a sense of novelty.² The overriding impulse behind this work is a reckoning with the severity of our ecological situation, and Hardy's text, we argue, might provide strategies for imaginatively engaging some of Morton's critical concepts in an effort to "creat[e] frameworks for coping with a catastrophe that, from the evidence of the hysterical announcements of its imminent arrival, *has already occurred*."³

Dark Ecology, Agrilogistics and Ecognosis

In his book *Dark Ecology: For a Logic of Future Coexistence*, Timothy Morton presents his approach to ecological aesthetics under the neologism *dark ecology*, where *ecology* stands as a metaphor for coexistence and *dark* signifies the noir-like realization that we are "the detective *and* the criminal" that have become "*a geophysical force on a planetary scale*"⁴ driving global warming and its correlate mass extinction. Dark ecology is situated in contrast to the positivities and optimistic interpretations that have historically defined the sensibilities of being ecological. It opens up a space for negativity, irony, ambiguity, fragmentation and horror to name but only a few aspects characterizing the implications of our coexisting or lack thereof.⁵ "Dark ecology," in Morton's conceptualization of the term, "undermines the naturalness of the stories about how we are involved in nature. It preserves the dark, depressive quality of life in the shadow of ecological catastrophe. Instead of whistling in the dark, insisting that we're part of Gaia," or interconnected in a harmonious "Zip-a-Dee-Doo-Dah" kind of way,⁶ "why not stay with the darkness"⁷ with which we as a species have brought about? For it is in *not* staying with the darkness that we might be missing the significance of what it means to live more ecologically, which is to mean, co-existentially.

Operative within Morton's dark ecology is a "twelve-thousand-year machination," an agricultural program beginning in the Fertile Crescent that Morton names *agrilogistics*, which operates like a viral code that reproduces itself in both the dominant history of land management production and as a program scripted within logic itself. Agrilogistics is the driver responsible for global warming and mass extinction, which, according to Morton, has become the "slowest and perhaps most effective weapon of mass destruction yet de-

vised.”⁸ If dark ecology is the name for our predicament, agrilogistics names the history and operative logic in how we have arrived.

And yet grounded within this ecological aesthetics and against the backdrop of agrilogistics is another neologism that concerns us most directly as an educational attitude to cultivate in an ecological philosophy of education. Morton names it *ecognosis*: a form of ecological awareness or attunement that “involves realizing that nonhumans are installed at profound levels of the human—not just biologically and socially but in the very structure of thought and logic. Coexisting with these nonhumans is,” for Morton, “ecological thought, art, ethics, and politics.”⁹ It is towards the continued development of this sensibility that we are most concerned in this paper.

In the next section, we will use these concepts as an exegetical exercise in translating themes throughout Hardy’s canonical text. After this, we will draw out some of the implications of this work for classroom practice. In both efforts we are following Roger J. H. King’s argument of “articulat[ing] the meaning of moral concepts”—in this case *dark ecology*, *ecognosis* and *agrilogistics*—“by embedding them in wider narrative structures and imaginatively embodying them in images of possible life practices,” which Hardy’s text opens up for us.¹⁰

Hardy’s Tess of the d’Urbervilles

One of the central points in Morton’s *Dark Ecology* is that the “Anthropocene is the first fully antianthropocentric concept,”¹¹ as the term itself is an acknowledgment that “humans created the Anthropocene.”¹² Morton turns to Thomas Hardy’s *Tess of the d’Urbervilles* to illustrate the early manifestations of the human “modes of agriculture . . . that now cover most of Earth and are responsible for an alarming amount of global warming emissions all by themselves, let alone the carbon-emitting industry that agricultural mode necessitated.”¹³ This truth is not a widely accepted one in mainstream media and political discourse. The current American president and many of his supporters deny the effect of human activity on climate change and are not receptive to climate science, let alone theories about how we might move toward *ecognosis*. The rhetoric of the political Left is that climate change deniers suppress the part of their consciousness that knows and understands the toll of human industry on the planet, humans, and nonhumans because consciousness of this truth interferes

with their motivations for capitalist gain. As Morton puts it, “no one likes having their unconscious pointed out, and ecological awareness is all about having it pointed out.”¹⁴ If adult citizens struggle with the cognitive processes of adopting ecognosis, how are we then to expect students to grapple with this concept?

We can use Thomas Hardy in the classroom the same way Morton uses him in *Dark Ecology*; that is, as a way of understanding the machine of agriculture as a symbol for human domination of the nonhuman world, yet one that is inextricably tied to our existence and evolution as a species. In addition to the nuances of Victorian morality that can be teased out and discussed through feminist, political, and religious lenses, Hardy’s “unique ecological vision” provides an opening for a reading of his work that furthers ecognosis and makes both palatable and urgent an ecological philosophy of education even in its figurative abstractions.¹⁵ Morton points out that “hiding in plain sight in the prose of Thomas Hardy . . . you see something even bigger than the Anthropocene looming in the background.”¹⁶ “What on Earth is this structure that looms even larger than the age of steam and oil?” Morton asks. His answer:

Hardy provides a widescreen way of seeing agricultural production, sufficient for seeing not only the immiseration of women in particular and the working class in general at a specific time and place but also the gigantic machinery of agriculture: not just specific machines, but *the machine that is agriculture as such*, a machine that predates Industrial Age machinery.¹⁷

Indeed, the backdrop of *Tess of the d’Urbervilles* is the agrarian English countryside which, before the turn of the twentieth century, saw mostly farmers (some prosperous, most struggling) and the women who were or hoped to be their wives. So, the Anthropocene is literally looming in Hardy’s work as he sets his story at a time when the Western world was on the edge of modernity and the Industrial Age. Further, Hardy’s novel parallels the rise of the agricultural machine to the pervasive misogyny of Victorian rurality in order to personify the rising Anthropocene. Here Morton’s *agrilogistics* can be glimpsed figuratively in the novel’s characters and the dynamic between them; namely, Tess Durbyfield and Angel Clare. The relationship between Angel and Tess anthropomorphizes the colonizing rhetoric of profit-driven land ownership and cultivation and,

moreover, masculinizes this rhetoric. More than a poster for the economically and socially vulnerable rural woman, Tess might also embody the uncultivated nonhuman world—vulnerable to, yet dependent on, the agricultural machine.

Tess, the daughter of a poor drunkard farmer, learns that she and her family are descendants of the ancient and well-to-do d'Urbervilles. When Tess's mother and father hear that the other last remainders of the line reside in nearby Tantridge, they send Tess to claim kinship in hopes that their connection to this wealthy family will ease their economic hardship. In doing so, Tess encounters Alec d'Urberville, the character often read as the villain. d'Urberville viciously preys upon Tess, eventually raping and impregnating her. After returning home defamed and defeated, Tess gives birth and buries the child in a short amount of time. After some years pass, Tess ventures out again and procures a position as a milkmaid at Talbothays Dairy under the employment of the charming farmer Crick and his wife and in the company of a chorus of other young women from rural families. This is the middle phase of the novel and arguably its most important, for it is "the Talbothays episode . . . [in which] Hardy emphasizes both humanity's rootedness in its natural environment and the degree to which it is intermingled with—indeed ultimately identical to—the nonhuman realm"¹⁸ and the one in which Tess meets and falls in love with Angel Clare. Taken with Tess and confident she would make an excellent wife for a dairy farmer, Clare proposes marriage to a trepidatious Tess. She worries that her blemished past will make her an unworthy bride for Clare. After finally accepting Clare's proposal and marrying him, Tess confesses the events of her past. Clare then denounces the marriage, and in the fashion of Victorian misogyny, deems the matter unforgivable.

We zero in on Morton's reference to Hardy in order to ask the following questions: What is Hardy's project beyond crafting a bleak caricature of the atrocity of Victorian misogyny set against the topographically lush and beautiful Wessex countryside? What questions might Hardy pose about the intermingling of our fates with the nonhuman world, the edge of modernity and the industrial age; and what might he have been looking ahead to? And, most importantly for our purposes here, how can *Tess* be read in an educational setting with an eye toward ecognosis? While there is no shortage of plant and animal imagery

in *Tess*, the most fertile aspect of the novel for an ecological philosophy of education we argue lies in the characters and their relationship to one another. While Alec d'Urberville, "Tess's rapist—a man who ravages the Wessex countryside in search of fresh, naïve prey, and who wields his influence to indulge his obsession with Tess,"¹⁹ seems the more obvious colonizer of the human and nonhuman world in the novel, we argue that in fact Angel Clare might be read as the figurative manifestation of the rising Anthropocene and arbiter of Morton's agrilogistics. Clare, the son of a learned clergyman, decides not to follow in the spiritual and scholarly footsteps of his father and instead decides to learn "how to be a rich and prosperous dairyman, landowner, agriculturist, and breeder of cattle."²⁰ While this seems a humble and good-natured pursuit on its face, Hardy is sure to allude to the subtly colonialist motivations driving Clare: "He would become an American or Australian Abraham, commanding like a monarch his flocks and his herds, his spotted and his ring-straked, his men-servants and his maids."²¹ The contrast between Clare's origins and current pursuits at Talbothays is played upon and complicated by Hardy as Tess wonders to herself why "a decidedly bookish, musical, thinking young man should have chosen deliberately to be a farmer, and not a clergyman, like his father and brothers."²²

Ecological education can be had through a reading of Angel Clare not as the virtuous man that he seems (denouncing his genteel life to be a humble farmer), but through a more nuanced reading of his character as a colonizer whose goal is to colonize the land, the cows, and Tess, thereby performing Morton's agrilogistics. Angel Clare turns to agricultural pursuits instead of spiritual work in a sense because it allows him to confine and make sense of his ontology as a quantifiable set of tasks and experiences in a way that the spirituality of his minister father and scholarship of his brothers cannot.²³ Morton points out that "agrilogistics promises to eliminate fear, anxiety, and contradiction—social, physical, and ontological—by establishing thin rigid boundaries between human and nonhuman worlds by reducing existence to sheer quantity."²⁴ Clare wants to quantify Tess in a similar way as an asset to his future dairy farm and cannot take the immeasurable experience of her past that has, in his mind, tainted her potential for the cultivation he imagines for her "mental harvest."²⁵ In fact,

Clare regards Tess in a similar fashion to the animals he hopes to one day pre-empt over in his own farm: while watching Tess, Clare observes her having the “constraint of a domestic animal that perceived itself to be watched. ‘What a fresh virginal daughter of Nature that milkmaid is!’”²⁶ he exclaims. Tess exists for Clare as a mere addition to the cattle he wishes to farm and manipulate to his own ends. Moreover, Clare is the only human member of Talbothays not at one point or another equated with the natural world and nonhuman others. Hardy “presents a world in which human, animal, and plant realms are thoroughly intermeshed”²⁷: the “sustained snores” of the men sleeping in the cart-house at night are likened to “the grunt and squeal of sweltering pigs” and their sleeping bodies to “large-leaved rhubarb and cabbage plants . . . broad limp surfaces hanging in the sun like half-closed umbrellas”²⁸; the milkmaids, “so charming in their light summer attire, clinging to the roadside bank like pigeons on a roof-slope”²⁹; and Tess herself, “the ardour of [Clare’s] affection being so palpable that she seemed to flinch under it like a plant in too burning a sun.”³⁰ The farmers, dairymaids, and Tess blend seamlessly into the natural world and atmospheric cyclicity. Yet Angel Clare stands alone and distinct from the nonhuman activity swelling and swirling around him, emblematic of the human man who denies his interrelatedness with the nonhuman world around him. Take, as another example, this passage in which Tess is yet again the subject of Angel Clare’s gaze:

The outskirts of the garden in which Tess found herself had been left uncultivated for some years, and was now damp and rank with juicy grass which sent up mists of pollen at a touch; and with tall blooming weeds emitting offensive smells—weeds whose red and yellow and purple hues formed a polychrome as dazzling as that of cultivated flowers. She went stealthily as a cat through this profusion of growth, gathering cuckoo spittle on her skirts, cracking snails that were underfoot, staining her hands with thistle-milk and slug-slime, and rubbing off upon her arms sticky blights which, though snow-white on the apple-tree trunks, made madder stains of her skin; thus she drew quite near to Clare, still unobserved of him.³¹

Tess moves through the garden in a way in which the boundaries of her person are indiscernible amidst the lines of plant and animal life she is surrounded by. As she moves cat-like through the untamed overgrowth, her skirt takes on “cuckoo spittle” and her hands “thistle-milk and slug-slime;” the skin of her white arms seem one with the “sticky blight” such that she is in perfect camouflage with the unruly scene. Tess, in Clare’s eyes, *is* the human yet nonhuman he wishes to plow and make profit of. Only later does he find out that Tess has already been the subject of someone else’s conquest: Alec d’Urberville, in raping and impregnating Tess, thrust her into the realm of societal and cultural webs that Clare so wishes to be rid of. Tess’s rape, her pregnancy, and her infant’s death challenge the rigid ontological boundaries Morton explains agrilogistics seek to solidify. Tess is at once human, nonhuman, societal, animal, virgin, and not. Like the wild and impenetrable overgrowth Tess moves through, the once seemingly conquerable nonhuman world seems to Clare out of his reach.

Hardy illustrates the nonhuman world as looming large over his characters and places it at odds with their agential ambitions. Tess seems no more in control of how the events of her life have unfolded and will unfold than Angel Clare is over the land and cows he hopes to wield. Hardy sets his story on the brink of modernity, at the cusp of the Industrial Age, but his characters are already both participants in and victims of the Anthropocene; in Morton’s terms, they are both the detectives *and* the criminals. As Angel and Tess travel from Talbothays following their wedding, they come upon a “feeble light, which came from the smoky lamp of a little railway station; a poor enough terrestrial star, yet in one sense more important to Talbothays dairy and mankind than the celestial ones to which it stood in such humiliating contrast.”³² The newlywed couple who have just departed the dairy farm of their former occupations watch as “the cans of new milk . . . [were] rapidly . . . swung into the truck,” and, as the train departs the station, “a fitful white streak of steam at intervals upon the dark green background denoted intermittent moments of contact between their secluded world and modern life.”³³ Hardy’s illustration of the looming industrialized modernity is noir-like in that the feeble light at the railway station is neither emblematic of progress, nor foreshadowing imminent doom; it is both accepting and foreboding. This passage is foreboding both because

of the looming Anthropocene and because of the looming disintegration of their marriage. When Tess tells Clare of the events of her past, he is unable to reconcile them with the woman he has fallen in love with: the “fresh virginal daughter of Nature.”³⁴ Indeed, Morton points out that “capitalist economics is also an anthropocentric practice that has no easy way to factor in the very things that ecological thought and politics require: nonhuman beings and unfamiliar timescales.”³⁵ Similarly, Tess’s timescale—her past experiences as they have impacted Clare’s ontology of her—is unfamiliar and thereby objectionable to him. The timescale of the nonhuman world is similarly unfamiliar and thereby objectionable to us; Morton, with Hardy as his unlikely ally, implores us to stay with the darkness and embrace the unfamiliar.

Building Bridges: Morton, Hardy and an Ecological Philosophy of Education

As a response to their alarming indictment of a theoretical and practical gap between philosophy of education and our ecological catastrophes and their call for an “*ecologizing* of philosophy of education,”³⁶ we have here proposed Morton’s *dark ecology*, *ecognosis* and *agrilogistics* as conceptual frameworks to further this discussion. In an effort to make these terms more palatable, we used Hardy’s *Tess of the d’Urbervilles* as a poignant example of how literature can be translated through this optic and used in the classroom. In this third and final part of the paper, we would like to flesh out some practical implications of Morton’s analysis and our analysis of Hardy à la Morton for the classroom. Our aim is to provide a series of bridges both theoretical and practical for an ecological philosophy of education.

In her book *The Public School and the Private Vision*, Maxine Greene shows how literature—especially the classics—can provide important imaginaries in education for students to grapple with the world: “It is, rather, that writers [are] likely to bring to the surface values, ambiguities, and unanswered questions relevant to schools but either ignored or unspoken by reformers preoccupied with literacy and social change.”³⁷ Using literature to guide our educational reforms toward an ecological philosophy of education might require something more compelling than didactic curricular reform, as Morton’s *ecognosis* happens at a post-conventional level of consciousness. We ought to look to the novelist, because “unlike the reformer or the orator, he is given to perceiving conflict

dramatically. It is his object to integrate his materials imaginatively, to achieve aesthetic resolutions rather than social change or effective persuasion; and he attempts to do this by exploring, probing, molding the particular forms.”³⁸ Just as Morton offers an ecological *aesthetic* in which to frame our understanding of both our victimhood and agency in the Anthropocene, the novel offers an idealized form of something that is both *happening* and *has already happened*. Though Tess’s story is situated in a particular time, right at the cusp of industrialized modernity, her and Clare’s interactions with the world around them are atemporal and illustrative of the darkness looming on the horizon—not just that it *was* looming but that it *is* looming.

A novel like Hardy’s allows us to glimpse what we might call the beginning of the Anthropocene, except, in Morton’s illustration, ecognosis—our understanding of ourselves as both participants in and victims of the Anthropocene in a noir-like logic—never begins or reaches an ending point: “ecognosis is like a knowing that knows itself. Knowing in a loop.”³⁹ What we ought to do, then, is to use the novel to illustrate that nonhuman and human interaction is always present, pressing, and relevant, as it is for the farmers and milkmaids at Talbothays. In looking to characters like Angel Clare and Tess Durbyfield as metaphors for ecological interaction, interference, and change, students can begin to see a complete *picture* of something rather than glimpsing bewilderingly into the void of *real life* and its unintelligible ambiguities.

Greene succinctly summarizes the approach we are after in her argument for the use of literature in philosophy of education:

We may be like observers in the chamber of a camera obscura, watching the lens at one end cast an image on the screen at the other. Like such observers, we may find that, because the tent is dark, the images of the world outside—or above—are so distinct as to show forth forms and interrelationships indistinguishable in the daylight beyond the tent. This does not mean that the projected images are more ‘real’ than what is out there in the sun. It simply means that we can see in new ways in the darkness—and that the outside world may never be quite the same again.⁴⁰

It is our hope to have provided a glimpse of how a canonical piece of literature used widely in the classroom can provide a way not only in *seeing* but also in *learning to be* with the darkness, for this is the place where we might begin to learn how to live co-existentially—which is, in our understanding—a foundational element for the continued development of an ecological philosophy of education.

1 This paper is part of a small niche of educational philosophy which recognizes Morton's work for the field. See for example: Jason J. Wallin, "Pedagogy at the Brink of the Post-Anthropocene," *Educational Philosophy and Theory*, 49 (2017): 1099-1111; Antti Saari and John Mullen, "Dark Places: Environmental Education Research in a World of Hyperobjects," *Environmental Education Research* (2018); Stephan L. Bengtsson, "Outlining an Education Without Nature and Object-Oriented Learning," in *Research Handbook on Childhoodnature*, ed. Amy Cutter-Mackenzie, Karen Malone and Elisabeth Barratt Hacking (Cham: Springer International, 2018), 1-22; Jonas Andreasen Lysgaard, Stefan Bengtsson and Martin Hauberg-Lund Laugesen, *Dark Pedagogy: Education, Horror and the Anthropocene* (Cham: Palgrave, 2019).

2 Maxine Green, *The Public School and the Private Vision: A Search for America in Education and Literature* (New York: The New Press, 2007).

3 Timothy Morton, *The Ecological Thought* (Cambridge: Harvard University Press), 17.

4 Morton, *Dark Ecology*, 9. Elsewhere Morton writes, "The function of *Romantic irony* is to show how far the narrator, who is thought to sit sideways to his or her narrative, is actually dissolved in it, part of it, indistinguishable

from it.” See Timothy Morton, *Ecology Without Nature: Rethinking Environmental Aesthetics* (Cambridge: Harvard University Press, 2007), 27.

5 Morton, *The Ecological Thought*, 16-17.

6 Morton, 16.

7 Morton, *Ecology Without Nature*, 187.

8 Morton, *Dark Ecology*, 5.

9 Morton, 159.

10 Roger J. H. King, “Narrative, Imagination, and the Search for Intelligibility in Environmental Ethics,” *Ethics and the Environment* 4, no. 1 (1999): 27.

11 Morton, *Dark Ecology*, 24.

12 Morton, 23.

13 Morton, 23.

14 Morton, 23.

15 John Heany, “Arthur Schopenhauer, Evolution, and Ecology in Thomas Hardy’s *The Woodlanders*,” *Nineteenth Century Literature* 71, no. 4 (2017): 516-45.

16 Morton, *Dark Ecology*, 42.

17 Morton, 42.

18 John Heany, “Arthur Schohephauer, Evolution, and Ecology,” 544-45.

19 Rachel Vorona Cote, “My Fictional Nemesis: Why Thomas Hardy’s Angel Clare is the Worst,” *Literary Hub*, June 2, 2017, <https://lithub.com/my-fictional-nemesis-why-thomas-hardys-angel-clare-is-the-worst/>.

20 Thomas Hardy, *Tess of the d’Urbervilles* (Hertfordshire: Wordsworth Classics, 1994), 108.

21 Hardy, *Tess of the d’Urbervilles*, 108.

22 Hardy, *Tess of the d’Urbervilles*, 108.

23 “Old Mr. Clare was a clergyman of a type which, within the last twenty years, has wellnigh dropped out of contemporary life. A spiritual descendant in the direct line from Wycliff, Huss, Luther, Calvin,” Hardy, *Tess of the d’Urbervilles*, 136; “. . . his brother the Reverend Felix . . . and his other brother, the Reverend Cuthbert, the classical scholar, and Fellow and Dean of College [at Cambridge],” Hardy, *Tess of the d’Urbervilles*, 135.

24 Morton, *Dark Ecology*, 43

25 Hardy, *Tess of the d’Urbervilles*, 107.

26 Hardy, 107.

27 Heany, “Arthur Schopenhauer, Evolution, and Ecology,” 519.

28 Hardy, *Tess of the d’Urbervilles*, 146.

29 Hardy, 123.

30 Hardy, 147.

31 Hardy, 106.

32 Hardy, 161.

33 Hardy, 161.

34 Hardy, 104.

35 Morton, *Dark Ecology*, 35.

36 Ramsey Affifi et al., “Introduction to Ecologizing Philosophy of Education,” *Studies in Philosophy and Education* 36 (2017), 230. See also Paul Morgan, “Reconceiving the Foundations of Education: An Ecological Model,” in *Philosophy of Education 1996*, ed. Frank Margonis (Urbana: Philosophy of Education Society, 1996), 294-302.

37 Green, *The Public School and the Private Vision*, xii.

38 Green, 4.

39 Morton, *Dark Ecology*, 5.

40 Green, *The Public School and the Private Vision*, 6.