Desire, Interspecies Love, and Becoming-Animal Reading "The Overstory" in Social Studies Education

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The pedagogical task is to make the "worlds" in literature available.

—Maxine Greene, *Landscapes of Learning* (1978)

He feels himself become another species.

—Richard Powers, *The Overstory* (2018)

REDERICK STARR, JR. BELIEVED the millions of trees damaged during the Civil War deserved care and rehabilitative love, as if they were soldiers (Tackach, 2019). For Starr, Jr., reconciliation exceeded society and culture; it also exceeded the human. He said, "Every part of the land suffers together" (as quoted in Tackach, 2019, p. 102). Trees suffer. And so, as Thoreau's (1858) pines "lift their evergreen arms to the light with perfect success" (para. 1), in the Amazon Basin,

the Achuar—people of the palm tree—sing to their gardens and forests, but secretly, in their heads, so only the souls of the plants can hear. Trees are their kin, with hopes, fears, and social codes, and their goal as people has always been to charm and inveigle green things, to win them in symbolic marriage. (Powers, 2018, p. 394)

On the other side of the world, Tjipel—a young girl in northern Australia—lies face down in a sandy creek. Tjipel is the creek. "First, Tjipel was an adolescent girl who dressed up as a young man. Then she became a creek. These morphological mutations did not kill her. Quite the contrary. They allowed her to persist in a different form" (Povinelli, 2016, p. 94). Let me sing to you now, about how people turn into other things.

Braidotti (2013) theorized death as a metamorphosis, a conceptualization that rejects death as an inanimate, entropic journey of "return" to a "natural" state. Building alongside Deleuze and Guattari (1987), Braidotti (2013) reconfigured death as overflowing with plentitude; within death, there is life, a way of being they call becoming-imperceptible, an interconnected "vital relationship" (p. 137). The Tachigali versicolor is a tree found in old-growth forests in Central and South America. Once a sapling has succeeded in gaining root, thriving in its parent's shadow, the elder Tachigali versicolor embraces death, becoming-imperceptible to let the light in, slowly decomposing into a lode of sustenance. With(in) death, the young tree is made to thrive, and with(in) death, the binary between life and death—or what matters and what matters only in relation to lack, to an indifferent state of nothingness—is reconfigured. Revealed, here, is the "frontier of the incorporeal" (p. 137), a realm in which what is "me," what is "you," and what is "other" is flattened into a relational state of interconnected mattering (Braidotti, 2013). In our reading, Braidotti's death theory is not an erasure of the divide between the human and nonhuman. As Kohn (2013) reminds us, obliterating this divide solves nothing—it will only reappear elsewhere. Rather, life and death, language and thought, remain bound up with issues of representation. Kohn (2013) writes, we need to "decolonize thought ... to see that thinking is not necessarily circumscribed by language, the symbolic, or the human ... reconsidering who in this world represents ... and what counts as representation" (p. 41). So, we suggest that what Kohn (2013) calls "an anthropology beyond the human" (p. 41) might decolonize the "living thought" of the Tachigali versicolor, a symbol commonly translated (and surely misconstrued) as "suicide tree" to something other, something beyond the limited bounds of human representation. Within this, what we call death and life are opened up, disclosing a few provocative questions: what might signs look like beyond the human, and what does a serious attendance to nonhuman representation provide? (Kohn, 2013). Following this, we position *Tachigali versicolor*, Tjipel, and the Maine woods as pedagogues; other kinds of living beings, but beings that are in ways that are other embodying different ways of swaying, dying, feeling, even thinking (Hage, 2015; Kohn, 2013). Taken seriously, this thought opens up new pathways for how we might imagine living with one another—human and nonhuman—in more just, life-giving ways, what is—in our view, and in agreement with Garrett (2017)—the raison d'être of social studies education.

Introduction

This article answers Tarc's (2020) call, in the *Journal of Curriculum Theorizing*, for engagements with texts that have jolted us awake, precipitating sudden swerves in new directions, "making us think and feel alive" (p. 40). We take *The Overstory* (Powers, 2018) as a jumping off point, and as social studies teacher educators, our theorization is attuned to how affective texts, like a novel, might be used to guide students down some of the pathways we imagined above. This article is also aligned with a larger, ongoing project we, along with many others, are engaged in: Responding to the unfolding climate catastrophe in interdisciplinary and critical ways in social studies education, theorizing—and aiming to embody—teacher and student dispositions that are more ethically attentive to our entanglements with nature, with matter. This is no small task. It requires onto- and epistemological adjustments regarding what it means to be human, and these shifts, we suspect, will not be accessed through a single, cherished portal that will magically bring about new ways of being and knowing. Rather, we see this work as rhizomatic, defined by Deleuze and Guattari (1987) as a process connected at many junctures and points, allowing for ceaseless

connections to be made "between semiotic chains, organizations of power, and circumstances related to the arts, sciences, and social struggles" (p. 7).

To this end, this article extends our prior efforts to disrupt normative curricular and pedagogical representations of the human and nonhuman beings and material things in social studies education (Nelson & Durham, 2022; Nelson et al., 2021), an ongoing project that engages with philosophy and theory (Barad, 2007; Bennett, 2010; Berlant, 2020; Povinelli, 2016; Tuin & Dolphijn, 2012) to build alongside the critical work of our colleagues in the fields of curriculum studies and social studies education (Baildon & Damico, 2019; Helmsing, 2016; Jarvie, 2019; Kissling & Bell, 2020; Sonu & Snaza, 2015). Ultimately, this amounts to an allied effort to continue imagining how the project of education can access new ways of being and knowing in the world. One more connection in the rhizome, this article explores how affective aesthetic texts are another entry point into the work of becoming other, and our theorizations usher forth from our readings and re-readings of the novel The Overstory (Powers, 2018), a text that moved us and changed us. Beginning with an interpretive overview of the novel itself, we tease apart three vibrant threads and put them into conversation with theory—desire (Deleuze & Guattari, 1987), interspecies love (Haraway, 2016; Kohn, 2013), and becoming-animal (Deleuze & Guattari, 1987; Massumi, 2014)—to theorize a social studies education that is radically open to the living thought of the nonhuman other (Kohn, 2013).

The Overstory: A Plateau in the Branches

There is a point in *The Overstory* (Powers, 2018), about midway through, when two of the book's nine human characters (one, a college pothead-turned-arbor-prophetess who goes by the moniker Maidenhair; the other, the last in a line of farmers-turned-occasional-artist named Nick) are in an old-growth forest in California, perched hundreds of feet above the ground. It is early morning, or maybe late afternoon, but they are sleeping, held safe by the massive boughs of a sequoia, one of the book's primary nonhuman characters (The novel is, at its core, about diverse tree lives—sequoia, chestnut, aspen—and the human lives entangled with their roots, branches, leaves, and towering trunks.). Having endured high winds and lightning, driving rain and heat, the two humans, now wild, or what we might jump to call, perhaps without thinking, feral (and what is it we really mean by either descriptor?), are able to expertly navigate the rickety plywood crisscrossing uneven branches, even in thick darkness. They have been in the tree for two months. Or has it been a year? The sequoia—at least 2,500 years old—is, somehow, under their protection, or at least this is what we assume; it is a "logic" that feels numbingly familiar. Doomed by its "usefulness," the sequoia has been tagged, in a queue to be felled. The two tree-huggers, as they are derisively labeled by the workers employed by a large lumber corporation, are the only "things" standing between the tree and a chainsaw. But they are not, quite importantly, "things" like the sequoia is a "thing," accorded value and rights by the State (what we reverently call "humanity") rights not extended to the sequoia, nor the millions of other creatures entangled within its vast rhizosphere—the two humans "live" (surviving and coping) upon, in between, and with(in) the organism they are, in the eyes of the State, "protecting." Their very presence, then, is the only reason the destruction of the other thing (an operation that would take less than seven minutes) a vast living organism more than two millennia old—has been delayed. But in this moment, at this point in the novel, the prophetess is awakened by a powerful, unnatural wind; chopper blades glimmer in the sun, blinding them—the blare of a megaphone fades in and out with the gusts made

by the mechanic bird. We are ordering you to vacate this tree. Your presence here is illegal. This tree is being destroyed tomorrow morning. And under the guise of usefulness, violent chaos is unleashed.

The inevitable attack upon the sequoia-human assemblage resonates with us because it stands as an exorbitant, anecdotal moment (Gallop, 2002), a moment in which we were affected and moved, by the text, towards theory and our everyday work as social studies teacher educators—one way of grappling with what the text was doing to us and had been doing all along. This article is an outgrowth of collaborative theorizing and sense-making, and it is also an attempt to join Tarc (2020) in bidding farewell to forms of reading and writing divorced from feeling. Instead, as Tarc puts it, we might "be like children only choosing objects that appeal to and move us," texts that, following Klein (1952, as cited in Tarc, 2020), "help us dream, speak, imagine, and revolt" (p. 35). Following this, rather than beginning this article with what might be expected—a summary, a list of characters, major plot points—we have offered an exorbitant moment (the sequoia-human assemblage) as a jumping off point, an affecting, albeit introductory, demonstration of our vibrant engagements with the novel. Massumi (1987) posits that the very point of reading is also the primary challenge of the text: "To pry open the vacant spaces that would enable you to build your life and those of the people around you" (p. xv) upon new plateaus, a fabric of life woven and constituted by the intensities that become the book itself. A book's function, then, does not dwell in the realm of understanding but rather the production of intense afterimages that linger, an opening up of the virtual. Like the pulsating yellows and reds that persist in the darkness, texts like *The Overstory* (Powers, 2018) do more than "stay with us"; they guite literally disclose new plateaus upon which *multiplicitous possibilities* can flourish, spaces in which new futures arrayed in difference and intensity can be imagined (Deleuze & Guattari, 1987).

The pedagogical implications provided by theorizations of "the book" that move beyond the human, what Snaza (2019) has called "animate literacies," are immense. First, attending to the affectivity of a book—and to affect more broadly—uncovers reading and writing practices that are constituted by interconnected vitalities, morphing the classroom into "an omnipresent, more-thanhuman scene of affective collisions and communications among entities and agencies" (p. 82). So, rather than literacy practices driven by understanding, completion, and other value-added measures that saturate many classrooms, "animate literacies" embrace the inherent ambivalence of affect, the possibilities for bewilderment and disorientation, movement and more-than-human relationality. Here, we want to emphasize the *ongoingness* of a book's transmission of intensities and connections between students, teachers, and the numerous other things (e.g., affects, objects) in a given classroom. The book, as it "exists only through the outside and on the outside" (Deleuze & Guattari, 1987, p. 4), is already metamorphosizing; that is its function, regardless of pedagogical objectives or whatever else. What is provided, then, is an invitation; less a daunting, (im)possible overhaul than an adjustment—a reattunement to phenomena already occurring. Deleuze and Guattari (1987) are even more blunt: "We will never ask what a book means, as signified or signifier; we will not look for anything to understand in it. We will ask what it functions with ... what bodies without organs it makes its own converge" (p. 4). In other words, the bookassemblage, as a deterritorializing machine, does not function according to humanizing desires; rather, we argue it can work to disrupt the disciplined movements that characterize teaching and everyday life in schools—an agentic, vibrant "thing" always functioning *outside*, always more vast than the sum of its parts (Snaza, 2019). Taken further, then, a more-than-human conception of "a book: might ask teachers to discontinue varied projects of reterritorialization; instead, and along with their students, they might run and leap with(in) the book, carving out new plateaus and imagining new futures and new politics.

Second, and following this, we offer the social studies classroom—a location well-versed in the reproduction of statist norms and humanizing politics—as a particularly well-positioned site for affective, more-than-human literacy practices. Following Snaza (2019), "Politics does not need assemblies, voting blocs, identifiable coalitions, and large aggregate groups. To assume that politics requires this is to prop up statist politics of recognition" (p. 150). In our view, Snaza's declaration highlights a crucial absence in (social studies) education; read generatively, the issue is not what a voting bloc can do or not do-rather, it is a matter of which beings (human and nonhuman) remain (un)recognized within normative statist voting blocs. Here, we can glimpse how reductive, humanizing definitions of "the political" erase the always more-than-human relationships that sustain us (e.g., trees, critters)—living things embedded a "public: that is inherently more-than-human (Bennett, 2010; Snaza, 2018). Crucially, and herein lies the primary offering of this article, *The Overstory* (Powers, 2018)—an agentic, intense assemblage—is alwaysalready functioning, metamorphizing visions of humanizing politics into something more-than, leaving intense after-images that not only resonate but can shift the deepest parts of us—how we are, feel, see, relate, and so on. Powers's (2018) affecting representation of a sequoia-human assemblage under attack from statist/corporate power demonstrates how "it is only when the very borders of the political are drawn for and around the fully human Man that being a thing, an object, an animal, and so on carries with it violent and devastating consequences" (Snaza, 2019, p. 47). So while our prior work (Nelson & Durham, 2022; Nelson et al., 2021) offered visions of social studies curriculum that invite our more-than-human entanglements into classroom inquiry invitations that aim to shift "the politics of recognition" (Snaza, 2019, p. 54) to nonhuman beings and inanimate objects—this article extends this work by theorizing how "a book," an agentic assemblage, might further open up teacher and student imaginaries to alternative (nonhuman) ways of being, feeling, and representing.

Aesthetic Texts in Social Studies: Confined to the Past and Undertheorized

Briefly, we want to situate this article alongside recent scholarship that has explored the relationship between social studies education, the arts (aesthetic texts), and classroom inquiry. It is evident social studies teachers commonly use a wide range of aesthetic texts to teach about the past—the historical inquiry often equated with social studies education (Christensen, 2006; Clark & Sears, 2020; Desai et al., 2010; Suh, 2013; Suh & Grant, 2014). Aesthetic texts like film, poetry, music, literature, art, and photography are used by teachers for a number of purposes: to represent past events in unique, engaging ways (Barton, 2001; Crawford et al., 2009); to enrich students' historical understandings (Epstein, 1994a, 1994b; Singer, 1991); and to produce affect in social studies—cultivating wonder, empathy, and other resonant responses (Garrett & Kerr, 2016; Helmsing, 2014; Segall, 2021). Indeed, for centuries—and until relatively recently—most people learned about the past and present through the arts, whether in school or in everyday life (Segall, 2021). From statues and monuments to stained-glass windows and sprawling historical novels, aesthetic texts were more than fanciful addenda to an authoritative historical narrative; on the contrary—the arts represented "truth." It should come as no surprise, then, that numerous articles and books have explored the integration of the arts in social studies education (Clark & Sears, 2020; Christensen, 2006; Desai et al., 2010). And yet, as Garrett and Kerr (2016) suggest, the use of aesthetic texts in social studies education remains undertheorized, meaning that what aesthetic texts can *do* in social studies classrooms (what imaginative futures they might open up) and *why* they are used is often reduced to a sort of commonsense instrumentalization—in short, aesthetic texts as a means to an end—the acquisition of historical content knowledge.

We position this article as participating in, and extending, the conversation surrounding aesthetic texts in social studies education. In our view, the primary matter at hand is what we will call textual invitation, what amounts to an openness—on the part of teachers (and students) across social studies' many disciplines and iterations—to unusual, or weird, aesthetic texts, texts that seem, at first glance, to be out of place in a social studies classroom (like *The Overstory* [Powers, 2018] perhaps). And while recent scholarship (Clark & Sears, 2020; Segall, 2021) has demonstrated the prevalence of certain aesthetic texts in social studies education (particularly in history classrooms), we call for more textual openness across the field's many disciplines. In other words, while it makes sense to us that film and photography, art and literature (mainly historical fiction) make frequent appearances in history classrooms, we wonder why aesthetic texts are relatively absent from the Civics or Geography courses down the hall. One hunch we have follows Garrett and Kerr (2016); it is a problem of theory, or a lack thereof—what aesthetic texts might provide *all* social studies classrooms, what they might open up and uncover, remains unimagined. This article aims to take part in such work.

Digging deeper, we can see how, even in history classrooms, the most conventional home for aesthetic texts in social studies, it can be difficult to realize textual openness—a meaningful embrace of textual spontaneity or surprise. For example, we suggest that when historical content usually delivered in a chronological fashion—guides curriculum, the textuality of the classroom can be dictated by periodization and a focus on particular events and figures, an approach that can potentially reduce textual possibilities (importantly, a thematic or nonlinear approach could achieve quite the opposite effect). And when teachers use aesthetic texts to teach a history lesson, perhaps juxtaposing an aesthetic text with an expository text to foster student engagement, interest, and analysis, the aesthetic text often remains positioned with(in) a marginal relation to the "main text" of the historical narrative; the former utilized as a way in to the more important work rigorous, evidence-based analysis of the latter (Donoghue, 1983; Greene, 1991; Segall, 2021). Here, we can see how the instrumentalization of the aesthetic text functions within a framework defined by lack (in relation to the "true" expository text), whether that means lacking in "truth" or "correctness," thus, cultivating the grounds for its eventual dismissal—an aesthetic text used and relegated back to the margins (Segall, 2021). Moreover, the classroom subordination of an aesthetic text to an expository text (however implicitly it might occur) furthers a Cartesian division between the cognitive and affective registers (and the primacy of the former), a far cry from views of teaching and learning "as a relation, one that unfolds in moment to moment encounters between teachers, students, objects, and texts as teachers create spaces of interaction rather than spaces of knowledge transmission" (Garrett & Kerr, 2016, p. 523). In this sense, the issue is not the content, per se, but whether students are being turned towards texts that, with(in) a text-student relation, might shift how they are and feel in the world, a pedagogical embodiment of textual openness we suggest could occur in any social studies classroom. Ultimately, we conceive of the social studies classroom as a location ripe for textual experimentation, and we follow Garrett and Kerr (2016) in imagining how texts of all kinds can bring students to life in social studies classes, representing ways of being, feeling, and knowing that move far beyond the conventional, Anthropocentric semiotics of social studies education.

Theoretical Framework: Desire, Interspecies Love, and Becoming-Animal

Literature, like *The Overstory* (Powers, 2018), is, according to Deleuze and Guattari (1987), "an assemblage" (p. 4); comprised of lines of articulation, lines of flight, measurable speeds, and movements of deterritorialization and destratification, a book—an assemblage—"is a multiplicity" (p. 4). Our readings of *The Overstory* (Powers, 2018) overlapped with other readings: a range of affect and more-than-human theories. Through this, we were, and still are, struck by moving repetitions, varied attitudes and orientations characterized by playful risk, unbound possibility, zig-zagging imaginaries, and unpredictable desires. In this section, we work through three concepts that, rather than *defining*, *translating*, or *explaining* our readings of *The Overstory* (Powers, 2018), unspooled it, a generative disassembling that continues even now as we write and rewrite. While these concepts (desire, interspecies love, and becoming-animal) may not be common lenses through which (social studies) educators view their curricula, we suggest that the homogeneity of the lenses they *do* use is, in part, what has led to the climate crisis that engulfs us. Therefore, we offer our readings of *The Overstory* (2018) not as a lesson plan for how to use this text in a classroom, but rather as an example of how being aware of, and attuned to, the *potential* this text and others possess to affect readers in powerful, unpredictable ways.

Desire

For centuries, desire has been theorized as *lack*; a want or need—a longing for something we do not have (Graeber, 2007). From Plato to Freud, Western thought has often coupled desire with sexuality and the libido, positioning desires—particularly desires deemed taboo—as phenomena to be repressed under social, cultural, and representational norms—what amount to methods of control. Deleuze and Guattari (1977) reconceptualized desire, conceiving it as a process of production, of creation. In this way, what they called desire production is tied to materiality, to reality—never confined (or reduced) to the cerebral and theoretical. A Deleuzoguattarian (1977) conception of desire breaks free from the repressive representations that limited past theorizations. For example, and in a classic turn of phrase, Deleuze and Guattari (1977) argued that desire *qua* lack cannot explain "the satisfaction the handyman experiences when he plugs something into an electrical socket" (p. 7). Rather, the satisfaction of the handyman is a *product* of desire—what they call a desire-machine. The handyman is a part of the desire-machine assemblage and so is the socket, the plug, and the many other interconnected parts positioned to create something new.

In their attempt to reveal the cacophony of desire machines around us, Deleuze and Guattari turn to the example of a schizophrenic unencumbered by the cultural and social pressures that might repress non-normative ways of thinking, feeling, and experiencing. On a walk, free from religious dogma and familial responsibilities, the schizophrenic perceives that "everything is a machine" (Deleuze & Guattari, 1977, p. 2). Consumed by "a feeling of endless bliss to be in contact with the profound life of every form, to have a soul for rocks, metals, water, and plants, to take into themself, as in a dream, every element of nature," the schizophrenic is part of "a photosynthesis-machine, or at least (can) slip their body into such machines as one part among the others" (Deleuze & Guattari, 1977, p. 2). In this way, the schizophrenic revels in their freedom, allowing the connections, of which they are a part, to be revealed naturally, authentically—

embracing entanglements with the world around them, not as a sovereign overseer, but as an equal and important part.

Finally, Deleuze and Guattari (1977) declare, "There is no such thing as either man or nature now, only a process that produces the one within the other and couples the machines together" (p. 2). Desire-machines trouble oppressive, normative representations that reinforce the separation between the human and nonhuman. Instead, desire-machines disclose what has always-already been, revealing that "the self and the non-self, outside and inside, no longer have any meaning whatsoever" (p. 2), producing new conceptions of the world that are interconnected, entangled, and blurred in ways not previously thought possible nor deemed acceptable.

Interspecies Love

We conceptualize interspecies love as a response-ability (Haraway, 2016) "for the differential constitution and differential position of the human among other creatures" (Barad, 2007, p. 136), a relation that seeks "to inhabit an inter-subjective world that is about meeting the other in all the fleshly detail of a mortal relationship" (Haraway, 2003, p. 34). Neither paternalistic nor naively unconditional, interspecies love emerges from chance encounters, moments of *noticing* the messy, more-than-human entanglements that sustain us. Interspecies love is fostered in shared moments of vulnerability and beholdenness, smallness and humility. Upending human-centered notions of domestication and cultivation, interspecies love is nourished by practices that slow things down, make us pause to look around, to *notice*. Tsing (2012) practices a style of *wandering* and noticing in the woods near her home, a habit that fosters chance encounters with fungal companions; the "orange folds of chanterelles pushing through the dark wet or the warm muffins of king boletes popping up through crumbly earth" cause her to "well up ... alight with the sweetness of life itself" (pp. 141–142). Love is embedded in such practices, and we call it "love" because of what it demands of our *noticing*, or as Carstens (2020) puts it, "what we are called to" (p. 79) in response.

A few examples: as Tsing (2012) is wandering in the woods near her home, she *notices* how "a mycorrhizal fungus is not just selfish in its eating. It brings the plant water and makes minerals from the surrounding soil available for its host" (p. 143), a noticing with numerous implications for herself and the more-than-humans that sustain her, and vice versa; in the midst of a landslide in Ecuador's Upper Amazon, Kohn (2013)—panicked, running, and looking for safe haven—is, all of a sudden, pulled up short; there—a small bird sits in a bush, staring at him. He writes, "That crisp image of the bird sitting right there in those shrubs grounded me again in a shareable real" (pp. 60–61), what he calls the us-ness of life, the "triadic of community" (p. 61); and in another scene, Kohn (2013) is walking in the forest and trips on a stump; reflecting later, he suggests that, while a habituated and flawed way of walking is good enough, it is not growing. He writes, "Perhaps that day ... I had become, for a moment, more like matter—'mind whose habits had become fixed'—and less a learning and yearning, living and growing self" (p. 65). Taken together, we offer these small noticings as examples of interspecies love—a response-able attentiveness that disrupts our habits and old relations, an opportunity to "remake ourselves, however momentarily, anew, as one with the world around us" (p. 63).

Becoming-Animal

The notion of becoming something other, something more-than-human, builds from an idea "dominant Western philosophy has blocked and suppressed" (Morton, 2016, p. 5): that being human does not require acquiescence to the human-made hierarchy, a hierarchy that positions the human as sovereign. It follows, then, that becoming something other than human requires an ontoepistemological shift, recognizing that "nonhumans are installed at profound levels of the human not just biologically and socially, but in the very structure of thought and logic" (p. 159). Deleuze and Guattari (1987) explore becoming in detail, characterizing it as uninterested in a sense achievement and unconcerned with the finite and specific. They write, "becoming is the movement by which the line frees itself from the point, and renders points indiscernible" (p. 294, emphasis added). In this way, becoming cannot be advanced by following a pre-determined sequence or pedagogically-planned path; it is too complex for that—especially when considering cross-species becomings. "The orchid does not reproduce the tracing of a wasp," posit Deleuze and Guattari (1987), "it forms a map with the wasp" (p. 12, emphasis added). Becoming in this way implies the process is characterized by "simultaneous movements," by "a block of alliance" (p. 292) that includes the human and nonhuman alike. In this way, becoming-human is tied up, entangled, and contoured by becoming-animal; the human and animal forming a map of becoming together.

"If the writer is a sorcerer," write Deleuze and Guattari (1987), "it is because writing is a becoming, writing is traversed by strange becomings that are not becomings-writer, but becomings-rat, becomings-insect, becomings-wolf, etc." (p. 240). In other words, writing about something other than the human is itself an act of becoming something other than human. Pushing further, Massumi (2014) playfully calls this practice "writing like an animal" (p. 62). Massumi positions writing like an animal as an ethico-aesthetic response to norms, what he calls "the leaden demands, so frequently heard, that one's actions be 'relevant' at all cost, that 'they contribute to society' in a way that is already recognizable" (p. 40). We offer this article as an exercise in writing like animals, consisting of a dual resistance to "the imperatives of already expressed importance" (p. 43) and an adoption of schizophrenic dispositions freed from the normative and non-weird. By recognizing the movement that characterizes becoming, we push toward what Massumi (2014) calls "lifeways to come" (p. 88)—situations unfolding into ever-unfolding situations.

Desirous Threads in *The Overstory*

Our readings and re-readings of *The Overstory* (2018) were fueled by desire. Prior to our readings, we found ourselves feeling lost, active players in an Anthropocene responsible for destruction on a scale not yet realized in human history and, as a result, desired something different, an "attunement to ecological reality more accurate than what is habitual in the media, in the academy, and in society at large" (Morton, 2016, p. 159). Our desires were pushing us to participate differently, to *be* in the world in ways that are less destructive and more open to what we can learn from the things around us—learning to *be* with the more-than-human in more loving and attentive ways. But these were not ways of being we *knew*; perhaps, then, we had to use the desire-machines emerging around us to create them.

The trees in *The Overstory* (2018) became partners in our quest, even, dare we say, our leaders. We plugged into the trees, and the resulting desire-machines continue to fuel our becoming closer to them, forcing us to be more attuned to *their* desires and more open to how, together, we

might map more livable futures. One character's arc in *The Overstory* (2018) captures the revelations and consequences of a similar desire-machine. Neelay Mehta's story begins just as home computing was becoming possible. He and his father built their own computers, machines that would become important parts of the desire-machine fueling Neelay's life. Akin to the walk of Deleuze and Guattari's (1977) schizophrenic, Powers (2018) removes an all-too-human feature from Neelay's worldly experience—he frees him from the confines of normative existence. After getting in trouble with a teacher in grade school, for rejecting the prescribed pedagogy the teacher had prepared, Neelay, afraid of the shame he had brought upon his family, climbs an encina tree near his school. The tree beckons him upward:

There, he takes stock in his ruined life.

He must suck things up, go home, and take his punishment. He leans out for a good look at the big picture, his last for a while. His parents will ground him for months.

He sighs. Steps down onto the branch below him to descend. And slips. There will be years to wonder whether the branches jerked. Whether the tree had it in for him. Limbs slam him on the way down. They bat him back and forth like a pinball.

Earth rushes up. He lands on the concrete path and bounces on his coccyx, which cracks the base of his spine. Time stops. He lies on his shattered back, looking upward. The dome above him hovers, a cracked shell about to fall in shards all around him. A thousand—a thousand thousand—green-tipped, splitting fingerlings fold over him, praying and threatening. Bark disintegrates; wood clarifies. The trunk turns into stacks of spreading metropolis, networks of conjoined cells pulsing with energy and liquid sun, water rising through long thin reeds, rings of them banded together into pipes that draw dissolved minerals up through the narrowing tunnels of transparent twig and out through their waving tips while sun-made sustenance drops down in tubes just inside them. A colossal, rising, reaching, stretching space elevator of a billion independent parts, shuttling air into the sky and storing the sky deep underground, sorting possibility from out of nothing: the most perfect piece of self-writing code that his eyes could hope to see. Then his eyes close in shock and Neelay shuts down. (pp. 102–103)

In this moment, we witness how Neelay's recognition of the increasing assemblage (that had always been there) begins to inform his desire-machine. It includes the sky, the sun, the tree, the rain, the twigs, the roots, the leaves, the rings, and it includes, though we are not yet sure how, Neelay himself. His injuries are permanent. He will never walk again. He becomes rooted to the ground just like the tree from which he fell (or was he pushed?)—the two beings now sharing more characteristics than those that separate them. But now, the code of the tree becomes the inspiration for the computer codes Neelay goes on to create. He dreams/desires computer codes that will one day be "living things," "self-learning, self-creating," "so fast, they'll think we're not even here" (p. 107). In short, the codes he desires are the codes already embedded in the trees, already written in nature.

It would be easy to describe the natural world, and trees therein, as Neelay's inspiration, his muses—but the situation is far more complex. In our reading, Neelay is navigating the world *alongside* the trees—seeking guidance, advice, and yes, inspiration. Above all, Neelay is an innovator, not only through the code he writes for the computer games he creates, but in how he lives his life, recognizing his role in the assemblage around him and open to the pleasure he receives from the trees around him, pleasures similar to Deleuze and Guattari's (1977) handyman

and socket. For us, what once seemed absurd within a human-bound view of human and more-than-human relations becomes possible *through* Neelay—his shift from the discreet ones and zeroes of computer code to a more-than human-tree relationship.

The depth of Neelay's connection to the trees around him is revealed one particular evening. Anxious about a major business decision he has to make, Neelay—instead of seeking out a peer or colleague—drives to Stanford's inner quad to think.

He spins 360, surveying, surrounded again by those otherworldly life-forms the way he was six years earlier. All those creatures from another galaxy, far, far away: dove tree, jacaranda, desert spoon, camphor, flame, empress, kurrajong, red mulberry. He remembers how they whispered to him about a game he was destined to make—a game played by countless people worldwide, a game that puts the players smack in the middle of a living, breathing jungle filled with potential only dimly imaginable.

Tonight, the trees are tightlipped, refusing to tell him anything He wills the menagerie of trees to give him a sign. The extraterrestrial beings wave their bizarre branches. The collective tapping in the air nags at him. Memory rises inside, like sap

The trees wave him on, to another tree, high in the mountains. Neelay drives around, back and forth, up and down, but cannot find it. Then he sees it, woven into the other shadows less than a dozen yards in front of him. He knows why he missed it: It's too big. Too big to make sense of. Too big to credit as a living thing. It's a triple-wide door of darkness into the side of the night And up the trunk runs, straight up, beyond comprehension, an immortal, collective ecosystem—Sempervirens. (pp. 195–197)

Sempervirens is a Latin term meaning always flourishing, vigorous. It is what Neelay names this redwood tree, and it is what he will name his coding company. Moreover, it is how he envisions his own existence; not separated from, but alongside—with, and connected to, Sempervirens. This new way of being drives his work and coding, his desires and decisions. It is a desire-machine that reveals to us, in a visceral sense, how we might also be plugged into to the natural world in ways that lead towards more-than-human flourishing. It is crucial to remember that it was Neelay's rejection of more traditional classroom practices (e.g., the identification of a lack (of knowledge) followed by activities aiming to erase the lack) that led him to the recognition that vigorous flourishing lay beyond such a structure. Indeed, it is a similar conundrum we confront as teacher educators. But now, our own desire-machines are beginning to produce conceptions of classrooms that are other, that are more-than what we have previously experienced. Different, even weird, ways of being in social studies classrooms that might lead towards more supportive, less destructive futures. Next, and to further this vision, we explore how affectations usually reserved for our human companions might be extended to the nonhuman beings we are always-already with.

Interspecies Love in *The Overstory*

For the human and nonhuman characters in *The Overstory* (Powers, 2018), the concept of love is a transcendent throughline, escaping frequent attempts to categorize, confine, and territorialize. The numerous human and nonhuman representations of interspecies love in *The Overstory* moved us in at least two different ways. First, they exceed the human, showing how

trees, human beings, and other living things can enter into pedagogical relationships of love and response-ability. Second, the text imprinted afterimages that still linger, rearranging our habits of noticing, the patterns of (in)attentiveness we consider foundational to ethical interspecies contacts.

This section is divided into two resonant, interconnected afterimages, snippets of text that continue to grow in size with(in) our imaginations, afterimages that color how we see ourselves—as writers and teacher educators—in ongoing interspecies contact, as well as how we imagine social studies curriculum and teaching responding to Tsing's (2012) crucial point: all humans and more-than-humans are, inescapably, interspecies.

Afterimage I

There is a fleeting moment in *The Overstory*, about one-third in, when Olivia Vandergriff, one of the book's human characters, is sitting in an old sedan. Her car is in park as a train crosses the road.

A long, slow, heartland freight rolls through on its way north to the superhub of Gary and Chicago. The steady *ka-thump* of the wheels through the intersection sets up a dub tune in her head. The train is endless; she settles in. (Powers, 2018, p. 164).

It is important to mention that Olivia has recently returned from the land of the dead; just weeks earlier, her heart fully stopped after being electrocuted in her college dorm room—an immoderate life put to rest. "She is dead for a minute and ten seconds. No pulse, no breath" (p. 157).

But she was returned, and now she thinks she is going crazy. "Beings of light" keep appearing to her, swarming her mind. "Something's watching—huge, living sentinels who know who she is" (p. 158). They hum, "You were worthless ... but now you're not. You have been spared from death to do a most important thing" (p. 163). Frightened, she leaves town, both enthralled and terrified by their sublime beauty and strength. She drives west, not aimless, but unsure of her final destination. She is being guided, led by the beings of light towards something—something pressing, something larger than herself—something they want her to do. Can it be possible she was meant to do something with her life? That morning, the beings of light invaded her car—they were everywhere.

Unbearable beauty ... passing into and through her body ... they speak no words out loud. Nothing so crude as that. They aren't even *they*. They're part of her, kin in some way that isn't yet clear. Emissaries of creation ... dying has given her new eyes. (p. 163)

She pleads with them to tell her what to do, "just a sign ... just say what you want of me" (p. 163). Waiting with a pencil and a scrap of cardboard, she waits, ready to record their commands.

And then, stopped at the train crossing, Olivia *sees*; indeed, her eyes adjust (or have they been slowly adjusting?) and she finally *notices*—in front of her is a forest, chopped and butchered.

Car after car clicks past ... a rolling river of wood cut into uniform beams streams by without end. She begins to count cars, but stops at sixty. She has never seen so much wood. A map animates her head: trains like this, this very minute, thread the country in every direction, feeding all the great metro sprawls and their satellites. (p. 165)

And as Olivia sits, her sight continues to shift; what she notices is expanding, becoming more capacious—affective attachments are being cultivated. What she cares about, what she will choose to love and fight for—even to the point of death, her own becoming-imperceptible (Braidotti, 2013)—extends to more-than-human creatures, to trees, living things that "make significance, make meaning, as easily as they make sugar and wood from nothing, from air, and sun, and rain" (Powers, 2018, p. 168), "living thought" that usually escapes human eyes (Kohn, 2013).

Interspecies contact is inherent to all relations (Tsing, 2012), but in our figuring, interspecies love requires an attitude of habituated noticing that is steeped in care and response-ability. Indeed, it is a new way of seeing—a kind that reorients future movements. Present, here, is a sort of enchanted animism, and we follow Kohn (2013) in looking for ways in which the world's enchantment might be continually rediscovered. He writes, "The world is animate, whether or not we are animists. It is filled with selves—I daresay souls—human and otherwise" (p. 217), so whether we think of *The Overstory*'s (Powers, 2018) beings of light as the living thought of trees, the "spirits" of the trees, or something else entirely, the magical weirdness of more-than-human representation remains—radical possibilities are opened up, by the text, with(in) our imaginations as readers.

For example, in social studies education, representations of past-present-future realities are decidedly human-centered; the human sits, sovereignly, atop a hierarchy, and an Anthropocentric reality is made real (and continually reified as such) because its representational currency is human-bound—a cyclical and systemic regime governed by rationality and the already-recognizable. Indeed, these are habitual ways of being, knowing, and noticing in social studies education, ontoepistemologies that reproduce *decidedly unenchanted* realities. Here, we are suggesting that textual afterimages like Olivia's moment at the train tracks—her sudden shift in seeing show how realities are multiplicitous—illuminate "more than that which exists" (Kohn, 2013, p. 216), so even as we cannot help but engage in the world in specifically human ways, Kohn (2013) reminds us there is still "a living world that lies in part beyond the human" (p. 216). Kohn continues,

Spirits are real. How we treat this reality is as important as recognizing it as such; otherwise we risk taking spirits to be a kind of real—the kind that is socially or culturally constructed—that is "all too human" and all too familiar. (p. 216)

In our reading, Kohn is highlighting an important difference between matters of kind; for example, Olivia's beings of light *are* real, but they are real in a more-than-human sense—a kind of realness that escapes "all too human" attempts to colonize with "understanding." Moreover, to acknowledge the existence of more-than-human realities demands a particular disposition—an open humility similar to how Olivia adjusts her sight, a *becoming* that is attuned to the beings of light and open to relations that are weird in how they exist with(in) realities that are human but also lay "in part beyond the human" (Kohn, 2013, p. 216). One implication, then, is that engaging social studies students with this textual moment might be *enchanting*, meaning the text's renderings of trees' living thoughts have the affective capacity to reconfigure students' everpresent interspecies contacts, perhaps opening them up to Olivia-like adjustments. An *enchanted social studies* is more-than-human in how it centers students' imaginations, inviting realities into the classroom that "lay in part beyond the human" (p. 216); not an abdication of "the human" but rather conceiving of "human" as *always-already* more-than-human—one way of helping students

flourish by acknowledging and attending to, rather than denying, our interspecies contacts in creative and response-able ways.

Finally, we find Olivia's *noticing* of the murdered trees compelling because of its suddenness; as a vivid, resonant afterimage, it jolted us awake, moving us to break from the page and look around—a kind of "looking" that was invariably altered. Importantly, *noticing* functions in the realm of tweaks and adjustments, not overhauls or born-again resets. Olivia's noticing—a moment in the book covered in less than a paragraph—demonstrates that what we love and care about, what more-than-human living thoughts we choose to notice and whom we choose to care for, is always an open question.

Afterimage II

We are still at the train tracks. Olivia has not moved. And suddenly, her mind is invaded by a stark vision: A circle of human beings, chained together, encircle a large sequoia. On a different plane of reality, cars begin to honk and then peel out around her, drivers yelling at the enchanted woman—a woman attending to the living thought of trees. The living thoughts of the trees radiate: "The most wonderous products of four billion years of life need help. She laughs and opens her eyes, which fill with tears. Confirmed. I hear you. Yes" (p. 165). In these few moments, Olivia's mattering map (Grossberg, 1992) is being rearranged; new habits of noticing disclose more-than-human relations, relations that are, in the text, reciprocal, in a quite literal sense. By "provincializing language" (Kohn, 2013), room is made for other kinds of thought, "a kind of thought that is more capacious, one that holds and sustains the human" (p. 224). Again, we can glimpse how an attendance to more-than-human thought increases the flourishing of the human, as though human-bound ways of being and knowing actively reduce our more-than potentialities. Following this, more capacious conceptions of "thought" do not run against the human; rather, other kinds of thought can "hold and sustain the human" (p. 224), a life-giving recognition of our interspecies beholdenness.

The ramifications of Olivia's noticing are steep; compounded with other small happenings, Olivia's *becoming* in the first half of the novel leads her to the boughs of the sequoia we discussed above, perhaps the book's most moving representation of interspecies love. By dwelling with(in) this afterimage, we can see how Olivia's noticings vault her into the sky; they literally move her into loving interspecies contact with a massive rhizo-sphere thousands of years old. For us, these afterimages continue to percolate, generating visions for how similar noticings, however inconsequential they might seem, can be cultivated in social studies classrooms—how the many trains we have watched pass hundreds of times, phenomena previously unnoticed or dismissed as meaningless, have the capacity to rearrange our mattering maps. Over time, Olivia *becomes* Maidenhair (just as Nick *becomes* Watchman and the sequoia *becomes* Mimas), and, in our interpretation, the interspecies love between Olivia, Nick, and Mimas is reciprocal because the sequoia's living thoughts—its capacity to represent ways of being and swaying that are *other*—are acknowledged by its human companions. And throughout their "triadic of community" (Kohn, 2013, p. 61), questions like who is protecting who, who is domesticating who, and who is teaching who are provocatively blurred.

Following this, the interspecies love between Maidenhair, Watchman, and Mimas is reciprocal in a pedagogical sense—yet another disruption of modernist conceptions of the teacher

(and curricular representations more broadly) qua exclusive to the human. When the two humans first meet the sequoia, it is evident Maidenhair is be(com)ing in a new kind of way. She says,

"Nick. We're here. In Mimas." She speaks the creature's name like it's an old friend. Like she's been talking with it for a long time A kerosene lamp illuminates her face. He has never seen her look so confirmed. "Come here." She takes his wrist and guides it to her. "Here. Closer." As if farther away were an option. And she takes him like someone who's sure that life has need of her. (Powers, 2018, pp. 262–263)

We see, here, that Maidenhair is *be(com)ing* upon multiple realities, an affecting example of how interspecies love can erode the mono-reality made hegemonic by modernity (Hage, 2015). And while Watchman remains stuck in a familiar mono-reality, Mimas is intent on teaching him other ways of being and knowing, "an archetypal form of teaching, namely that of *showing*" (Biesta, 2017, p. 44, emphasis added). In this afterimage, the two humans have lived with(in) Mimas for just a few weeks. Night is approaching, and Maidenhair turns to Watchman (Nick):

Can you feel it?" she asks, under the mayhem in the western sky early one evening, or perhaps the next. With no more explanation, he knows what she means. He can read her mind now, so many hours have they passed together in purposeless contemplation, knee to elbow, elbow to knee. Can you feel it lift and disappear? That standing wave of constant static. The distraction so ubiquitous you never even knew you were wrapped up in it. Human certainty. The thing that blinds you to what's right here—gone. He can—can feel it. The tree, like some tremendous signal beacon. The two of them, turning into something powered by the spots of speckled sun that reach them through the dozens of feet of Mimas's branches still above them. (Powers, 2018, p. 294)

Rendered in the text as a "signal beacon," Mimas is teaching Watchman and Maidenhair by *showing* its human companions how to be, know, and feel in ways that are *other*, how "human certainty" flattens life's multiple realities into a mono-reality, a "standing wave of constant static" that obscures other planes and possibilities, even versions of themselves that can begin "turning into" something more-than they are, "something powered by the spots of speckled sun"—just as they were a moment before, but positioned differently in relation to one another, human and nonhuman.

More-Than Human Pedagogies: Teaching as Showing

Mimas's pedagogy of showing is crucial, here, and we follow Biesta (2017) in making a critical distinction between two teaching archetypes: teaching as showing and teaching as explanation. For Biesta, education is not about a teacher "facilitating expression but about bringing children and young people into dialogue with the world ... turning them towards the world and about arousing their desire to be in the world and with the world, and not just with themselves" (p. 37). Teaching as showing is an interruptive gesture—a turning of the student towards something the teacher believes is worth engaging with. Moreover, an interruptive showing is, quite radically, followed by risky openness—a literal "Look!" that is invested in student freedom and the infinite, uncoerced possibilities that might follow. It is important to note that Biesta (2017) does not

position teaching as explanation as the negative side of the same coin; rather, the ambitions of both archetypes differ in critical ways. Explanation is about bringing someone into reason, into "a domain of sense-making or, in more abstract terms, into a world—a world in which some things make sense and other things don't make sense" (p. 45), and we want to emphasize the oft-needed place of explanation within the complex, ever-unfolding pedagogical scene. And yet, we are struck by the human-boundness of teaching as explanation; it is a pedagogical archetype we all recognize—the social studies classroom as a landscape of rationality and sense-making, not bad aims, per se, but aims that work, in turn, to reproduce an Anthropocentric mono-reality. What is lost, here, are more-than-human approaches to teaching—following Mimas, pedagogies that turn students towards strange, enchanting encounters.

Teaching as showing requires form and thought, what Van Manen (2015) calls pedagogical tact—generative, meaningful interruptions do not (usually) simply happen (A point that holds numerous implications for forms of "student-centered inquiry" we have observed in many social studies classrooms, approaches that, unfortunately, are lacking in form, thought, and tact.). Teaching is "not (just) about facilitation, flourishing, letting emerge, or even letting learn, but it is always involved in the more difficult question concerning the quality of what is arriving or emerging. This makes the work of the educator fundamentally risky" (Biesta, 2017, p. 88). In other words, tactful *showing* requires risk from both the teacher and student; showing is not an abstract interruption, but an interruption one person (the teacher) has decided is worth turning the student towards—an intimate and "profoundly relational gesture," the prelude to what Biesta (2017) argues art can *do* in education:

Art can offer resistance, art can slow down, art can make people stop in their tracks, art can make us think, art can make our heads turn, art can make our hearts skip a beat, art can offer us something to get our hands on. (p. 89)

In our view, Mimas's more-than-human pedagogy exemplifies Biesta's (2017) vision on at least two levels: one, as a teacher in relation with Maidenhair and Nick, Mimas's is *showing* their students an alter-politics (Hage, 2015) freed from human certainty and a mono-reality; two, Mimas teaches us, present-future readers, within and through the affectivity of *The Overstory* (Powers, 2018). On multiple planes, then, Mimas's branches reach out and touch us, revealing new realities.

Ultimately, Mimas's pedagogy succeeds in *turning* Watchman and Maidenhair towards the world, and Biesta's (2017) use of "arousal" and "desire" capture the primal nature of the triad's pedagogical scene. Quietly, or perhaps silently (After all, Maidenhair is adamant the beings of light do not "speak"; the trees' living thoughts are communicated with(in) a strange, undefinable resonance.), Mimas teaches the two humans by *showing* them an ontology that is *more-than* the distracting static of human certainty. The tree does not lecture them; neither does Mimas explain how, or what, a human-bound mono-reality is lacking. Rather, Mimas, "like some tremendous signal beacon" (p. 294), simply *shows* Watchman, turning him towards other realities, realties that have *always-already* been *more-than*. Taking a tree's pedagogical capacity seriously opens up multiple realities, alter-worlds that multiply beyond the text, beyond our readings and re-readings; again, the textual theorization of Mimas as a more-than-human pedagogue in *The Overstory* (Powers, 2018) resonates and lingers in powerful, affective afterimages, coloring how we see Mimas's leafy relatives in a walk around the block or on a wooded path, as well as how we continue to (re)imagine ourselves in relation to a world that, if we are turning towards it, continues to unfold in multiplicitous, unpredictable ways—all beginning with a book, with the living thoughts of trees.

Dwelling with(in) the shimmering afterimages of Mimas *qua* teacher, we imagine social studies classroom futures in which the teacher, as a shower, might think about arousing the desires of their students to be *in* and *with(in)* a more-than-human world in new ways, a project that follows Spivak's (2001) conception of the very purpose of education: The "uncoercive rearrangement of desires" (para. 16). And as Biesta (2017) reminds us above, art—and specifically affective aesthetic texts like *The Overstory* (Powers, 2018)—can *do* this work with us, texts we turn our students towards in tactful, risky, and provocative ways.

Becoming-Tree in *The Overstory*

During the process of becoming, the dynamo of desire picks up with energetic speed. Powers, the sorcerer writer, renders *tree* with such magic that he—and we as readers—are always-already *becoming* with(in) the book-machine, becoming-animal, becoming-tree. Writing in reviews of the novel, other readers touch on this phenomenon. Shapton (as quoted in Dwyer, 2018) suggests that "Unlike the Lorax, who spoke for the trees, Powers prefers to let them do their own talking" (para. 11), and Kingsolver (2018) writes,

Using the tools of the story, [Powers] pulls readers heart-first into a perspective so much longer-lived and more subtly developed than the human purview that we gain glimpses of a vast, primordial sensibility, while watching our own kind get whittled down to size. (para. 3)

Both commentators highlight the affective impact Powers' "writing-tree" has on the reader—Shapton (as cited in Dwyer, 2018) underscores the trees' more-than-human forms of representation, and Kingsolver (2018) describes a generative sense of self-diminishment that can accompany "glimpses" of nonhuman tree-sensibilities (para. 3). Returning to *The Overstory* itself (Powers, 2018), the human character Dr. Patricia Westerford best illustrates the process of becoming-human/animal/tree and how those processes are one and the same. Aside from her father, Patty's most loyal and constant childhood companions were the twig creatures she created. Of course, the "twig creatures could talk, though most, like Patty, have no need of words" (Powers, 2018, p. 112). Her connection to the natural world was cultivated by her father, the two of them even conducting a decade-long experiment in the back yard to figure out from whence beech trees gain their mass (the answer is from the air). But Patty did not feel comfortable until graduate school; it was there, in the woods around Madison, Wisconsin, that Patty discovered something remarkable was happening with the maple trees she was studying. The maples, under "full-scale insect invasion" (p. 125), responded.

The trees under attack pump out insecticides to save their lives. That much is uncontroversial. But something else in the data makes her flesh pucker: trees a little way off, untouched by the invading swarms, ramp up their own defenses when their neighbor is attacked. Something alerts them. They get wind of the disaster, and they prepare. Only one conclusion makes any sense: The wounded trees send out alarms that other trees smell. Her maples are signaling. They're linked together in an airborne network, sharing an immune system across acres of woodland. These brainless, stationary trunks are protecting each other. (pp. 125–126)

Protecting each other? In our first readings, this notion struck us, jolting us awake (Tarc, 2020)—a lingering and strangely resonant afterimage. The idea that seemingly-individual and stationary (literally rooted) entities act beyond themselves, showing concern (can we say this?) about the well-being of others was a proposition we had not expected. The very fact we are considering (and writing about) the caring motivations of maple trees is significant evidence of multiple becomings taking place—something creative and productive. Following Carstens (2020), when care is rendered immanent, when it is freed from human-exclusivity and extended to Patty's maple trees, opportunities to care become radically available, and a more-than-human ethic begins to take shape. To *care* for another requires a first step—a noticing, a response to a need or harm. By reconfiguring care as more-than—as beyond the human—opportunities to care are multiplied, an ever-expanding ethics of care that is bountiful in what, and who, we can respond to in caring ways. Once again, we can glimpse how a human-bound mono-reality reduces concepts like care by confining them to the human realm. So, rather than excluding Patty's maples and her twig figures, an immanent conception of care imagines responses borne out of reverence and knowledge—what becomes a mutual, more-than-human respect for the caring responses we might begin to notice are always-already happening around us. In our readings, this moment generated a sort of respect for trees, even feelings of wanting to be more like them. What the text did (and continues to do as an afterimage) is to productively trouble sentimental characterizations of trees. The text provides escape routes for the trees, varied ways of leaving the mono-reality of human metaphor to plant roots upon multiple planes. And the text helps us escape, too, offering numerous becomings—human, tree, other—that continue to affect how we see our maple companions (and other diverse tree lives) in our own neighborhoods and woods.

Throughout The Overstory (Powers, 2018), Patty is writing her own book, The Secret Forest, and through each new chapter of her book, resonant instances of "writing-tree" occur. In all of this, both Powers and Patty embolden and energize the becoming-tree of the reader, fueling curious meanderings. And over time, we are no longer sure of the boundaries that separate the tree from "the human world" or what, in fact, it means to be tree and/or (not) human. The lines blur as the language used to describe both adopts a unified timbre. Powers and Patty write that if you "join enough living things together, through the air and underground ... you wind up with something that has intention" (pp. 283–284). Because the concept of intention has always, in our prior readings of the world, been confined to humans, applying intention to trees struck us as weird. That a tree, or, in the case of aspens, an entire forest even, could act with intention continued to chip away at the human-bounds governing our mono-reality. And yet, we know we are joined with trees, for example, through the air we exhale as poison, air taken in as nutrition by trees, and then reconstituted and given back to us-again and again-as life-sustaining oxygen. As we linger with(in) the knowledge that we (us/me/you) are entangled with diverse tree lives—indeed, one cannot live without the other—it becomes evident that more-than-human intentions are (or should be) informed—and shaped by—our interaction. In fact, according to Powers and Patty, "the gap between trees and people is nothing at all" (pp. 394–395). In her last appearance in *The Overstory* (2018), Dr. Patty Westerford challenges the reader by describing humanity's changing notions of the sentience, and subsequent value, of nonhuman beings as compared to trees. Through this moment, we starkly realize trees have been "speaking" to us all along, but we have not been attending to their living thoughts.

We scientists are taught to never look for ourselves in species. So, we make sure nothing looks like us! Until a short while ago, we didn't even let chimpanzees have consciousness,

let alone dogs or dolphins. Only man, you see: only man could know enough to want things. But believe me: trees want something from us, just as we've always wanted things from them Men and trees are closer cousins than you think. We're two things hatched from the same seed, heading off in opposite directions, using each other in a shared place. That place needs all its parts. (pp. 453–455)

Risking anthropomorphism, *The Overstory* (2018) asks us to see ourselves in and through other species, illuminating how we ought to care for them in response-able, loving ways, and to become with them—just as we have since the beginning of time, whether we noticed or not. Dr. Patty Westerford demonstrated—through becoming with her companion trees, her conspirators in research—that a human-bound separation between human and tree does not exist. And so, if we consider becoming an important part of any educational endeavor, we cannot ignore the infinite more-than-human relations that are always-already a part of such becomings. Certainly, becominghuman has tragically affected the becomings of trees in our backyards, our communities, and our interconnected world. We wonder how many other aspects of our shared becomings we have ignored—how unaware we remain of other opportunities to respond, in caring and loving ways, to more-than-human need and harm. Through its magical affectivity, *The Overstory* (2018) produced desires in us to understand the role trees play in our individual and collective lives, and it has begun—with(in) our theorizations, our writing and re-writing—to reconfigure our dispositions towards trees, towards each other, and towards the more-than-human. This is just one derivative of the ontoepistemological shifts our desires have produced and *The Overstory* (2018) has hastened: that our becomings are always-already more-than-human, not separate from the many other becomings of the nonhuman beings and things around us; that attending to our entanglements with the other (both human and nonhuman alike) can lead to the more supportive, less destructive ways of being we ultimately seek.

Conclusion

To conclude, this article has, in many ways, aimed to answer Tarc's (2020) call "to experiment with the 'literary pedagogy' of texts that bring us closer to feeling for our own world and those of others" (p. 40). *The Overstory* (Powers, 2018) is a text that made us *feel* far beyond ourselves, feelings that, while self-perceived, shape-shifted (and continue to shape-shift) as we plugged our desire-machines into this strange text. Our feelings became more-than ourselves, a sense of self that was both diminished (in a humble sense) and expanded in how our sight had changed. We had become—and are still becoming—better at noticing; more attentive to the more-than-humans that sustain us and that we can, in turn, care for also. Of course, these shifts have started to emerge in various ways in our practices as social studies teacher educators, and one larger hope for this article is that it might nudge social studies teachers and teacher educators to begin thinking more *expansively* about how affective aesthetic texts like *The Overstory* might be invited into our classrooms in creative, experimental ways. The varied pathways this article offers are ones we hope readers might take up, reconfigure, steal, and re-shape to fit their own practices in meaningful ways.

Finally, we position a text like *The Overstory* as a potentially joyful intervention into climate discourses that are, for many good reasons, overwhelming, depressing, and seemingly

hopeless. In discussing his novel's potential as an affective text, Powers (as quoted in Klein, 2021) suggests,

If the arts take up this story of kinship, connectivity, the relocation of meaning outward into a shared process of rehabilitation, what seems like a depressive set of sacrifices to very little end could instead begin to be represented as a sort of joyful assertion of purpose, a kind of leverage of diversity and difference. (n.p.)

In our view, in this time of ongoing (and worsening) climate crisis and mass extinctions of species, the work of social studies teachers and teacher educators must be responsive, full stop. Disavowing pedagogical responsibility according to arbitrary (and made up) disciplinary boundaries in a field as richly interdisciplinary as social studies cannot continue. We encourage the many social studies educators already engaged in this critical work to continue becoming, to continue experimenting and playfully challenging mono-reality curricular norms. All texts, no matter the genre, ought to be invited into our classrooms. After all, we never know what a text can *do* until we turn our students towards it. Until we show them.

Epilogue

The Greeks had a word, xenia—guest friendship—a command to take care of travelling strangers, to open your door to whoever is out there, because anyone passing by, far from home, might be God. Ovid tells the story of two immortals who came to Earth in disguise to cleanse the sickened world. No one would let them in but one old couple, Baucis and Philemon. And their reward for opening their door to strangers was to live on after death as trees—an oak and a linden—huge and gracious and intertwined. What we care for, we will grow to resemble. And what we resemble will hold us, when we are us no longer. (Powers, 2018, pp. 498–499)

References

Baildon, M., & Damico, J. S. (2019). Education in an age of limits. *Journal of Curriculum Theorizing*, 34(3), 25–40.

Barad, K. M. (2007). Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning. Duke University Press.

Barton, K. (2001). A picture's worth: Analyzing historical photographs in the elementary grades. *Social Education*, 65(5), 278–283.

Bennett, J. (2010). Vibrant matter: A political ecology of things. Duke University Press.

Berlant, L. (2020, September 7). Cruel optimism: Online lecture at Skopje pride weekend. *YouTube*. https://www.youtube.com/watch?v=xR7Iuf_jJIU

Biesta, G. J. J. (2017). Letting art teach. ArtEZ Press.

Braidotti, R. (2013). The posthuman. Polity Press.

- Carstens, D. (2020). An ethics of immanence: Posthumanism and the politics of care. In V. Bozalek, M. Zembylas, & J. C. Tronto (Eds.), *Posthumanism and political care ethics for reconfiguring higher education pedagogies* (pp. 80–92). Routledge, Taylor & Francis Group.
- Christensen, L. M. (2006). Using art to teach history to young learners. *Social Education*, 70(5), 312–315.
- Clark, P., & Sears, A. (2020). The arts and the teaching of history: Historical f(r)ictions. Palgrave Macmillan.
- Crawford, B. S., Hicks, D., & Doherty, N. (2009). Worth the wait: Engaging social studies students with art in a digital age. *Social Education*, 73(3), 136–139.
- Deleuze, G., & Guattari, F. (1977). Anti-Oedipus: Capitalism and schizophrenia. Viking Penguin.
- Deleuze, G., & Guattari, F. (1987). A thousand plateaus: Capitalism and schizophrenia. University of Minnesota Press.
- Desai, D., Hamlin, J., & Mattson, R. (Eds.). (2010). *History as art, art as history: Contemporary art and social studies education*. Routledge.
- Donoghue, D. (1983). The arts without mystery. Little, Brown.
- Dwyer, C. (2018, September 20). From "Everything Under" to "Overstory": The 2018 Man Booker Prize shortlist. NPR. https://www.wamc.org/2018-09-20/from-everything-under-to-overstory-the-2018-man-booker-prize-shortlist
- Epstein, T. (1994a). The arts of history: An analysis of secondary school students' interpretations of the arts in historical contexts. *Journal of Curriculum and Supervision*, 9(2), 174–195.
- Epstein, T. (1994b). Sometimes a shining moment: High school students' representations of history through the arts. *Social Education*, 58(3), 136–141.
- Gallop, J. (2002). Anecdotal theory. Duke University Press.
- Garrett, H. J. (2017). Learning to be in the world with others: Difficult knowledge and social studies education. Peter Lang.
- Garrett, H. K., & Kerr, S. L. (2016). Theorizing the use of aesthetic texts in social studies education. *Theory & Research in Social Education*, 44(4), 505–531.
- Graeber, D. (2007). Possibilities: Essays on hierarchy, rebellion, and desire. AK Press.
- Greene, M. (1978). Landscapes of learning. Teachers College Press.
- Greene, M. (1991). Texts and margins. *Harvard Educational Review*, *61*(1), 27–39. https://doi.org/10.17763/haer.61.1.d537217p75k75025
- Grossberg, L. (1992). Is there a fan in the House? The affective sensibility of fandom. In L. A. Lewis (Ed.), *The adoring audience: Fan culture and popular media* (pp. 50–65). Routledge.
- Hage, G. (2015). *Alter-politics: Critical anthropology and the radical imagination*. Melbourne University Press.
- Haraway, D. J. (2003). *The companion species manifesto: Dogs, people, and significant otherness*. Prickly Paradigm Press.
- Haraway, D. J. (2016). *Staying with the trouble: Making kin in the Chthulucene*. Duke University Press.
- Helmsing, M. (2014). Virtuous subjects: A critical analysis of the affective substance of social studies education. *Theory & Research in Social Education*, 42(1), 127–140. https://doi.org/10.1080/00933104.2013.842530

- Helmsing, M. (2016). Life at large: New materialisms for a (re)new(ing) curriculum of social studies education. In N. Snaza, D. Sonu, S. E. Truman, & Z. Zaliwska (Eds.), *Pedagogical matters: New materialisms and curriculum studies* (pp. 137–151). Peter Lang.
- Jarvie, S. (2019). Promising truths, in fiction & teaching: Sincerity. *Journal of Curriculum Theorizing*, 34(2), 90–104.
- Kingsolver, B. (2018). Into the woods. [Review of the book *The Overstory*, by R. Powers]. *New York Times Book Review*.
- Kissling, M. T., & Bell, J. T. (2020). Teaching social studies amid ecological crisis. *Theory & Research in Social Education*, 48(1), 1–31.
- Klein, E. (Host). (2018, September 28). This conversation with Richard Powers is a gift [Audio podcast episode]. In *The Ezra Klein Show*. The New York Times Company. https://podcasts.apple.com/gb/podcast/this-conversation-with-richard-powers-is-a-gift/id1548604447?i=1000536849438
- Kohn, E. (2013). *How forests think: Toward an anthropology beyond the human*. University of California Press.
- Massumi, B. (1987). Translator's forward: Pleasures of philosophy. In G. Deleuze & F. Guattari, *A thousand plateaus: Capitalism and schizophrenia* (pp. ix–xv). University of Minnesota Press.
- Massumi, B. (2014). What animals teach us about politics. Duke University Press.
- Morton, T. (2016). Dark ecology: For a logic of future coexistence. Columbia University Press.
- Nelson, P. M., & Durham, B. S. (2022). Vibrant curriculum: Theorizing a new materialist social studies. *Journal of Curriculum and Pedagogy*, 19(3), 231–253. https://doi.org/10.1080/15505170.2021.1895381
- Nelson, P. M., Segall, A., & Durham, B. S. (2021). Between aspiration and reality: New materialism and social studies education. *Theory & Research in Social Education*, 49(3), 449–476. https://doi.org/10.1080/00933104.2021.1912679
- Povinelli, E. A. (2016). Geontologies: A requiem to late liberalism. Duke University Press.
- Powers, R. (2018). *The overstory*. W.W. Norton & Company.
- Segall, A. (2021). The role of the arts in extending and challenging the boundaries of history education [Review of the book *The Arts and the Teaching of History* by P. Clark & A. Sears]. *Canadian Social Studies*, 52(1), 2–10.
- Singer, M. J. (1991). Historical sense through the arts. *Arts and Learning Research*, 9(1), 101–117. https://doi.org/10.2307/3333760
- Snaza, N. (2018). Is John Dewey's thought "humanist"? *Journal of Curriculum Theorizing*, *32*(2). http://journal.jctonline.org/index.php/jct/article/view/627
- Snaza, N. (2019). Animate literacies: Literature, affect, and the politics of humanism. Duke University Press.
- Sonu, D., & Snaza, N. (2015). The fragility of ecological pedagogy: Elementary social studies standards and possibilities of new materialism. *Journal of Curriculum and Pedagogy*, 12(3), 258–277.
- Spivak, G. (2001, February 15). Speaking for the humanities. *Arcade: The Humanities in the World*. https://arcade.stanford.edu/occasion/speaking-humanities
- Suh, Y. (2013). Past looking: Using arts as historical evidence in teaching history. *Social Studies Research and Practice*, 8(1), 135–159.

- Suh, Y., & Grant, L. (2014). Assessing ways of seeing the past: Analysis of the use of images as historical evidence in the NAEP U.S. history assessment. *The History Teacher*, 48(1), 71–90. https://www.jstor.org/stable/43264380
- Tackach, J. (2019). Lincoln and the natural environment. Southern Illinois University Press.
- Tarc, A. M. (2020). Engaging texts today or how to read a curriculum poem. *Journal of Curriculum Theorizing*, *35*(1), 32–45.
- Thoreau, H. D. (1858). The Maine woods. *Henry David Thoreau online*. http://www.thoreau-online.org/the-maine-woods-page62.html
- Tsing, A. (2012). Unruly edges: Mushrooms as companion species. *Environmental Humanities*, I(1), 141-154. https://doi.org/10.1215/22011919-3610012
- Tuin, I. V. D., & Dolphijn, R. (2012). New materialism: Interviews & cartographies. Open Humanities Press.
- Van Manen, M. (2015). *Pedagogical tact: Knowing what to do when you don't know what to do.* Left Coast Press.

