



Commentary: Sovereignty and Sustainability in Mohegan Ethnobotanical Literature

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Ecocritics are tiptoeing cautiously toward sustainability studies, judging from recent special issues of *American Literary History* and *PMLA*. Not everybody is sanguine about the prospect. About a decade ago, John O'Grady cautioned that the idea of sustainability was—in a word—unsustainable. Another ecocritic has proclaimed that “the era of sustainability is over” (Mentz 586). Now that it peppers every election-year speech and university brochure, sustainability is garnering increasing interest and increasing hostility. Notoriously protean in definition, the term seems to suggest, in one moment, a practical path to addressing human-ecological crisis, and in the next, an ideological cover for the status quo.

This was nowhere more evident than at Rio+20, the United Nations Conference on Sustainable Development held in June 2012 in Brazil. Two decades after the Rio Earth Summit produced Agenda 21—the international consensus on sustainable development, and now nemesis of Glenn Beck and his acolytes—Rio+20 was widely condemned for failing to produce any meaningful change at the level of government and policy.¹ The conference's official language slid dispiritingly toward “sustain-*ed* development,” putting capitalist expansion over ecological concerns. Meanwhile, though, a parallel event, the People's Summit, created the Indigenous Peoples' Kari-Oca 2 Declaration. This document articulates a strong critique of the “Green Economy” and its premise that the world can only “save” nature by commodifying its life giving and life sustaining capacities as a continuation of the colonialism that Indigenous Peoples and our Mother Earth have faced and resisted for 520 years. The “Green Economy” promises to eradicate poverty but in fact will only favor and respond to multinational enterprises and capitalism. It is a continuation of a global economy based upon fossil fuels, the destruction of the environment by exploiting nature through extractive industries such as mining, oil exploration and production, intensive mono-culture agriculture, and other capitalist investments. All of these efforts are directed toward profit and the accumulation of capital by the few.

The declaration calls for “true sustainable development,” with indigenous people and values at the center. It demands “Free Prior and Informed Consent” as “the determinant and legally

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binding principle of approving or rejecting any plan, project or activity affecting our lands, territories and other resources”:

As peoples, we reaffirm our rights to self-determination and to own, control and manage our traditional lands and territories, waters and other resources. Our lands and territories are at the core of our existence – we are the land and the land is us; we have a distinct spiritual and material relationship with our lands and territories and they are inextricably linked to our survival and to the preservation and further development of our knowledge systems and cultures, conservation and sustainable use of biodiversity and ecosystem management.

It is surprising that this document did not immediately become a canonical text for environmentalists and sustainability advocates, so powerful is it in its address to extractive capitalist expansion. On the other hand, perhaps it's *not* so surprising that Kari-Oca 2 doesn't get more airtime. Its critique of capitalism and ecocide hinges, after all, on a critique of a system of which non-indigenous citizens are the beneficiaries, willingly or not: settler colonialism.ⁱⁱ

Sustainability has been called a discourse of modernity (Cheney et. al.). As such, it puts indigenous people in an awkward position, “ransack[ing them] selectively for ideas and insights capable of curing Western ills” (Harré, Brockmeier, and Mühlhäuser 137), while excluding them from the right to participate in the future, especially when they inconvenience settler societies by, say, insisting on exercising their sovereign treaty rights. But as the ongoing history of indigenous activism insists—including Kari-Oca 2 and the recent Idle No More and anti-fracking protests in Canada—settler colonialism is ongoing. Invasion did not occur only in the remote past and end in “conquest”; this is why the historian Patrick Wolfe calls it “a structure, not an event” (2). This structure—with its intertwining and enduring exploitation of indigenous lands and indigenous people—is what, in the understanding of Kari-Oca 2, stymies true sustainability.

This commentary is in two parts. In the first, I try to parse some of sustainability's discontents. Some are cogent, but they almost invariably fail to recognize two critical historical developments: first, the rapid rise of sustainability science as a thoroughly transdisciplinary field that emphasizes interrelated *systems*; second, the history of the term “sustainability” itself—a history of evolving and contested definitions, most notably among coalitions of indigenous and grassroots activists from the global South. Both of these developments should be attracting humanities scholars in general, and ecocritics in particular. Both developments have striking affinities with some hard-won ecocritical insights, including William Cronon's historical deconstruction of the idea of “wilderness,” Bruno Latour's coinage “natureculture,” and Stacy Alaimo's theory of “transcorporeality.”

In the second part of this commentary, I consider what sustainability might mean for indigenous literature—and what indigenous literature might mean for sustainability. My case study is a tradition of ethnobotanical writing from the Mohegan tribal nation, located in what is now Connecticut. This tradition stretches at least as far back as the eighteenth-century missionary Samson Occom and forward to the speculative fiction of current-day medicine woman Melissa Tantaquidgeon Zobel. It deserves, I believe, a special place in sustainability studies, but not simply because it “represents” sustainable practices. Mohegan writing seldom documents or conveys ethnobotanical knowledge in any transparent way. Instead, it poses serious questions

about what will be sustained, by whom, how, and why—questions about power relations under settler colonialism that should be at the forefront of any discussion of sustainability.

Rio+20 illustrated something fundamental about sustainability: that it is global in reach (some will say entrenched, continually co-opted by hegemonic forces) but that it also carries a powerful set of counterdefinitions and counterdiscourses. If we really believe, as readers of this journal surely do, in the possibilities of counterdiscourse, then ecocritics have serious work to do in reclaiming sustainability discourse, and in re-centering indigenous sovereignty.

From Sustainable Development to *Sustainabilities'* Development

It's not hard to see why "sustainability" has some people rolling their eyes, for many of the same reasons they have come to roll their eyes at the mention of "diversity": as a big-tent term intended to produce cooperation among many conflicting parties, it is easily commandeered and diluted—by businesses trying to sell products, by college campuses trying to market themselves, by individual consumers and citizens seeking to feel good about their own practices. In "Sustainable This, Sustainable That," Stacy Alaimo observes that "although the concept of sustainability emerges in part from economic theories that critique the assumption that economic prosperity must be fueled by continual growth, the term is frequently invoked in economic and other news stories that do not in any way question capitalist ideals of unfettered expansion" (559).

Ecologists Julianne Lutz Newton and Eric Freyfogle are more damning: "Sustainability's popularity. . .provides telling evidence that conservation is on the rocks. . . . Conservationists need to get their act together, intellectually and morally" (24). In their view, ecological concerns have been fully subordinated to human demands under the ostensibly "green" heading of sustainability. Like Alaimo, they see dangerous parallels between current invocations of sustainability and ideals of conservation at the turn of the last century, particularly as articulated by the influential first head of the U.S. Forest System, Gifford Pinchot. To Alaimo, that period's "frenzy to conserve" was "driven by the desire to demarcate the country's resources conservation was belonging to some groups and not others" (559), especially under the pressure of increased immigration. To Newton and Freyfogle, Pinchot-style conservation was ultimately too anthropocentric: it gave humans the upper hand in "managing," "using," or "protecting" nature, as opposed to imagining "nature's overall limits or the wisdom of bending our lives to respect nature's time-crafted ways" (25).

That sustainability, like conservation, has or could become a celebrated liberal cause that covertly underwrites existing inequalities and destructive behavior is a serious charge to consider. The word sustainability, after all, hints that we can keep going the way we're going. Newton and Freyfogle's chief concern is that ecological destruction is largely invisible to most people, and they blame sustainability's admittedly long list of concerns: "When sustainability is defined broadly to include the full range of economic and social aspirations, it poses the particular risk that ecological and biodiversity concerns will be cast aside in favor of more pressing human wants" (23). In a recent issue of *Orion*, Paul Kingsnorth similarly complains that "today's environment is about people," not nature.

These complaints, however, allow "sustainable development" to occlude the development of sustainability discourse. Specifically, they betray a lack of engagement with the more nuanced

definitions of sustainability among scientists and communities of color. Only about as old as ecocriticism itself, the new field of Sustainability Science addresses itself to intractable and multivalent problems like climate change, species depletion, and poverty. Instead of discrete disciplines and methods, it emphasizes *systems*—not only specific systems like earth systems or biological systems, but also systems thinking, an epistemology that stresses interrelatedness.ⁱⁱⁱ Sustainability Science has come in for some attack for not being empirical *enough*, due in part to its commitment to radically transdisciplinary work, including community-based participatory research (Silka 4)—a commitment that should make it attractive to humanities scholars.

One particular cohort of sustainability scientists is drawing attack from people as diverse as ecocentrists and Fox News commentators: the climate scientists. In Kingsnorth's irascible assessment, everything comes down to "Carbon and climate change. To listen to most environmentalists today, you would think that these things were the only things in the world worth talking about." Newton and Freyfogle, more measured, single out ecological footprint programs for trying to "calculate the amount of nature that an individual's or nation's lifestyle requires" (26). While it's hard to deny the existence of an often naïve popular faith in technocratic rescues, these critiques overlook the aims of the more thoughtful sustainability scientists, who are concerned with nothing less than "the limits of resilience and sources of vulnerability for [the Earth's] interactive systems" (Clark and Dickson 1737). Quite contrary to fantasizing that we can buy or invent our way out of ecological disaster with wind turbines, such scientists are desperately trying to communicate the reality that we *cannot* keep using and using. This is a message for which, let us remember, many are being pilloried; climate change scientists are now subject to the same kind of vitriol experienced by feminist and critical race scholars during the so-called culture wars of the 1990s. Many climate scientists surely feel alone in insisting on the needs to recognize nature's limits, to do the one thing that Newton and Freyfogle say we are responsible for: "improv[ing] our own behavior" (25). If carbon footprint calculators seem naively empirical, people can be forgiven for looking for a tangible rubric or measurement by which to accomplish this improvement.^{iv}

Further, these critiques betray a lack of awareness of the highly contested and evolving nature of sustainability discourse. The single most commonly cited definition of sustainability comes from the World Commission on Environment and Development (WCED), also known as the Brundtland Commission: "meet[ing] the needs of the present without compromising the ability of future generations to meet their needs" (2.1.1). This definition, and many subsequent iterations, yoked sustainability to development; and in the minds of many, sustainability lovers and haters alike, development is what sustainability means. But the Brundtland report was written in 1987, and since then, many richer definitions have emerged, particularly within global indigenous and anti-poverty movements. This grassroots opposition has been adamant that the world's wealthiest nations cannot keep calling all the shots—that cultures need to be sustained alongside ecologies, even if (or when) it means resisting development. Long before Kari-Oca 2, the Earth Charter of the World Commission on Culture and Development emphatically re-defined development as "being more, not having more." The Global Scenarios Group has described a "great transition" devoted to "changing the relationship between well-being and income"^v, a call echoed by James Gustave Speth, who calls for "a new consciousness" that can reverse this simple fact: "The story of the pursuit of happiness in America is . . . a story of its close alliance with capitalism and consumerism" (128).^{vi} There are thus already some deep ways of thinking about sustainability that insist on the interrelatedness (an ecological—and ecocritical—concept, after all) of environment, equity, cultural practices, and cultural values.

One final problem with some sustainability critiques is that, even though the best of them (like Alaimo's) worry about privileging the middle-class perspectives of the global north, others do precisely that. This is most unsettling in the Kingsnorth screed, where he posits, flippantly, that climate change will mean "we are going to end up darned our socks again and growing our own carrots and other such unthinkable things."^{vii} Climate change, as Kingsnorth would surely admit if pressed, is already having much more deleterious effects, and those impacts are all-too-familiar in their differential impacts, hitting hardest on poor people, women, people of color. Likewise, Newton and Freyfogle's sense that "the public" remains largely unaware that production methods are destroying the environment would surely be news to the Penobscot people who cannot eat their fish due to industrial pollution or to the Cataret Islanders evacuated from their homeland in the South Pacific due to rising sea levels.

We might, then, actually concede Newton and Freyfogle's objection that sustainability, as a concept, "need not be linked to land, to the land's functioning, or to any ecological science" (23). We might go further and concede that the most profound sustainability work demands the contributions of every conceivable discipline and perspective, including such allegedly metronormative fields as queer studies, disability studies, and critical race studies. It requires transdisciplinary teamwork—collaborations in which, in fact, every member of the team need not necessarily understand every aspect of every other member's scholarship.^{viii}

In sum, "sustainability"'s co-optation isn't necessarily a reason to get rid of it, even if we could. For the time being, at least, it appears that sustainability is here to stay, and we might do better to embrace its contestability as a virtue, especially because sustainability can never be finished, can never be the purview of one group or a handful of groups. In the words of Tom Kelly, a nationally recognized leader for sustainability in higher education,

The fundamental place of community in sustainability cannot be overstated. Collective reflection on the overarching project of all these efforts is a vital part of the sustainable learning community and a formative experience in the give and take of community life. Not only is the community the focus of what is to be sustained, it is also the basis for the ongoing *process* of sustainability . . . sustainability is a contested, plural idea that has to be worked out continuously by communities of diverse perspectives, conflicting values, and particular ecological and cultural settings (Aber et. al. 6).

In this spirit, sustainability scientists are calling for colleagues in the humanities who can help them think about the cultural practices that represent and shape human behavior. They understand fully what Gillen Wood wrote in his introduction to the special issue of *ALH*: "data accumulation must give way to the work of social narrative and analysis, to the ecocritical description of human desires, histories, and discourses . . . between the data and the decision-maker, between the motive and the action, between past and present, lies the mandate and charge of sustainability studies in the humanities" (4). Humanities scholars can't afford to play lefter-than-thou with sustainability discourses, and sustainability advocates shouldn't do their work without humanities perspectives. As Daniel Philippon puts it, "we cannot hide behind our critical questioning of the concept of 'sustainability'; we can't use our criticism as a way to delay action or evade responsibility for actually *living* more responsibly, however imperfect our definition of 'sustainability' may be" (170).

Mohegan Literature as a Sustainability Intervention

The Mohegan community has one of the longest-standing and best-curated literary histories among tribal nations in the northeast, thanks in no small part to its medicine women—women like Fidelia Fielding (1827-1908), her protégé Gladys Tantaquidgeon (1899-2005), and Tantaquidgeon's grand-niece, Melissa Tantaquidgeon Zobel.^{ix} On the one hand, it might appear that writing about traditional plant knowledge is a sound sustainability intervention: if your plants are under assault, and your community's knowledge of those plants appears to be attenuated, you might want to record that knowledge for future use. On the other hand, medicine people are usually extremely protective of sacred knowledge, unwilling to speak of it, much less write about it.^x There are many reasons for such reticence, but one of them is certainly the history of alphabetic literacy as a form of colonial violence. Ethnobotanical knowledge has been particularly vulnerable to theft under settler colonialism—today in the form of biopiracy, and historically in the form of ethnography.^{xi} Anishinaabe historian Wendy Makoons Geniusz, who calls for “decolonizing botanical teachings,” has conducted a careful survey of tribal knowledge published at the turn of the last century by the Bureau of American Ethnology (BAE)—an institution she calls “an integral part of the mechanisms that supported the colonizing structures in North America” (22). Geniusz shows how ethnographers primitivized this knowledge: describing it as “pre-literate”; masking or discrediting the expertise of Native consultants; and coercing, misrepresenting or decontextualizing indigenous knowledge—for instance, by publishing word-lists, which she finds antithetical to indigenous knowledge-keeping systems (19).

One earlier Mohegan writer kept word lists, but did so in a way that manages to circumvent these colonizing mechanisms. Samson Occom (1723-1792) compiled a list of herbal medicines that was likely never intended for use outside of his immediate circles, but that instead *sustained* knowledge more often transmitted orally. Occom is best known today for having been one of the first Native Americans to publish in English. Converted to Christianity and trained as a minister, he wrote a brief autobiography and numerous sermons, many of which enjoy continued circulation in classroom literature anthologies, as scholars and students ponder his complex navigations of indigenous and Christian practices and identities. His 1754 herbal, however, is barely known or studied.^{xii} While Occom wrote in an age of print, and frequently availed himself of print, this particular text was likely not meant *for* print, indicating an approach to literature and sustainability that does not involve the former simply recording and disseminating the latter.

Occom was also writing in an age of great poverty and illness for Native people in New England. While the outright violence and armed conflict of colonial invasion had subsided, imported disease was taking its toll, as was the malnutrition brought on by the seizure of indigenous land bases and traditional subsistence methods. Working as an itinerant preacher, Occom would have been confronted with these issues daily. In compiling the herbal, he paid a Montauk man named Ocus for 52 herbal remedies (Joanna Brooks 47) and recorded them in evident haste—briefly, even elliptically. Typical entries read “Indian Elm good for Sore mouth,” or “Sweet flay good for Cloted Blood.” Some remedies are missing names, as in “a wead good to Restrain women from bearing Children.” Others omit the specific malady to be cured. At times it appears that Occom intended to use or pass on the remedy immediately, as in the directive, “Take some Weecup and sweet Fern for the boy—And for your Self the Same Weecup & Sweet Fern or some Sage, or Hysop—and take Some Bone and Burn it thoroughly and Pound it Fine

and about half a Spoon full at a time with a little water just before or after meal.—And make Powder of great Centry, to take in Drink, Either Water or weak Punch.”

Made of fewer than a dozen sheets folded together into a 3x5 packet, with just two stitches along the seam to hold it together, the herbal would fit easily in a pocket. Its later pages are blank; flipping the booklet over, one sees notations for what might have become a sermon. Occom’s herbal seems, then, to have been functional, likely intended for personal use only, or for personal and community use. It is an entirely different kind of text from the botanical catalogues and treatises that were becoming popular in his day.^{xiii} A booklet like this could easily have been a spur to renewed oral tradition, and thus to sustainability—of the plants themselves, and of the communities dependent on them. We have some evidence, in fact, that it worked, at least as part of a much larger communication ecosystem: Jason Mancini finds a significant continuity between the plants enumerated in Occom’s booklet and those appearing in the thesis written by Gladys Tantaquidgeon a century and a half later. Today, Mohegan linguist Stephanie Fielding has been documenting some of the same plants in her Mohegan Language Project,^{xiv} while tribal leaders including Melissa Zobel are well-acquainted with the Occom text, and use it, and Tantaquidgeon’s, to help them identify plants around the reservation.

Whatever Occom’s intentions, it is beautiful and ironic that the man who has been read as an exemplary “assimilated” Indian created this document, an enduring testament to—and steward of—the sustainability of Mohegan community and Mohegan plant knowledge. In a period when those people and that knowledge had ostensibly “vanished,” Occom’s herbal diary shows that they were very much alive, and making complicated decisions about what to sustain and why, from hyssop to Christian sermons. Indeed the sustainability of Mohegan plant knowledge depended not on a static idea of the primordial past, but on adaptation: in his diary for August 1786 (Joanna Brooks 340), Occom notes that he was harvesting ginseng, a plant that Native people had begun selling in response to the global trade with China.^{xv} Occom never calls for anything to be preserved in amber, be it a Native plant or a Native person. Unromantically, his writings show Native communities trying to navigate the demands of colonialism, globalization, ecological integrity and their own cultural identities all at once.

In this sense, Mohegan ethnobotanical knowledge, literature and plants become *biocultural resources*, a term offered by ethnomusicologist Jeff Todd Titon to help us think of cultural forms as always embedded in systems (“ecosystems”) comprised by sets of ideas, behaviors, artifacts and institutions. Titon has been productively using ecological concepts to re-tool earlier anthropological models of heritage management, in which professionals identify “folk masterpieces” and create institutions to protect these. He describes instances in which cultural sustainability interventions, like ecological interventions, have had unintended consequences, especially when they targeted a specific cultural form (an “organism”) without regard for the long-term health of the system overall. For example, when UNESCO designated the Royal Ballet of Cambodia a masterpiece of intangible cultural heritage, it unwittingly prompted the creation of a specific display repertoire for tourists, while stymieing the development of more dynamic and modern dance forms, which came to be seen as less “authentic.” If we consider cultural forms—including literary texts—as biocultural resources, we see that they have the best prospects for, and the most to contribute to, sustainability when their creators and their stewards are mindful of such concepts as diversity and interconnectedness.

The Mohegan case is particularly germane to critical sustainability studies, because today, while few people could name even a single Mohegan writer, many know, and are ready to condemn, this tribal nation's massive casino, Mohegan Sun. To many neoliberal types, Indian casinos elicit a kind of schadenfreude bordering on euphoria: "see, give Indians a chance and they'll be even worse for the environment than white people." This line of thinking tells us much less about indigenous predispositions toward conservation than it does about garden-variety racism; knee-jerk anti-modernity, especially when modernity is being embraced by Indians; and, worst of all, a refusal to confront the economic and political circumstances that force tribal nations to use casinos in the first place.^{xvi}

Misconceptions about Indians and the environment are almost too numerous and pervasive to account for. In 1999 anthropologist Shepard Krech published *The Ecological Indian: Myth and History*, a well-received book that purported to correct the longstanding stereotype of indigenous people living in perfect harmony with pristine natural environments. Although the book was heralded for debunking entrenched myths, other scholars have countered that the "finding" that Native people, too, have historically caused environmental damage is, after all, fairly banal (Harkin and Lewis xx). Darren Ranco, a Penobscot anthropologist deeply committed to sustainability research, remarks, "It does not take a rocket scientist to understand that the idea of the ecological Indian fits well in the context of European and U.S. colonial practices, all of which have been designed to take and exploit the resources of Native American peoples. So, if social scientists want to know why Indians talk about land and assume the role of ecologists or conservationists, they have to understand that we see ourselves this way because of what we have witnessed others do" (37–38). In Ranco's own fieldwork, he finds that "ecological self-representation," although frequently unsuccessful, "is one of the few avenues for justice" open to indigenous people in contemporary legal and material contexts (33). If sustainability as an epistemology demands that we attend to systems and interrelations, any reading of indigenous environmental literature, or of indigenous environmental activism, needs to consider the specific contexts in which Native people are taking up any given strategy.^{xvii}

Melissa Tantaquidgeon Zobel, twenty-first century Mohegan medicine woman, descended from Fidelia Fielding and Gladys Tantaquidgeon literarily and familiarly, continues their tradition of sustainability writing, insisting on the inseparable relations between Mohegan people and Mohegan land. Most recently she has turned from historical writing to speculative fiction, using it to open the most deliberate dialogues about the politics of sustainability. The sci-fi novel *Oracles* (2004) opens with a tribal casino going down in flames, literally and metaphorically. This failed exercise in economic sustainability belongs to the Yantuck Tribe, a fictional group whose landscape, people and culture close resemble the Mohegans.' For most tribal members, who call it "Oz," the casino has become the center of the reservation, eclipsing sacred Yantuck Mountain; but for Ashneon Quay, the novel's protagonist and young-medicine-woman-in-training, its extinction marks the welcome return of stars in the sky, as the casino's light pollution vanishes: "This night, evening felt right for the first time. It was a glittering, black-beaded gala night, a night to celebrate and give thanks. Ashneon stretched heavenward toward the faraway flames that burnt up the mountain sky. The bright lights of Big Rock would never again ruin another evening for those masters of the night" (5).

The year looks very like 2050. By that year, scientists have famously predicted, the current rate of global warming will have extinguished anywhere between 15 and 35 percent of the world's species. In *Oracles*, plants and trees have taken the worst hits. Medicine Woman Winay

Weekum lives with her brother, Chief Tomuck Weekum, on top of Yantuck Mountain, where she “has her hands full with the precarious livelihood of the plant creatures”: “pollution had so altered the plants they could no longer be expected to do their job” (33); “Too little rain was followed by too much flooding. Searing heat waves were halted by blizzards. The weather had simply gone berserk” (15). In fact, trees have become so rare that busloads of children come up the mountain to see these rare specimens.

Loosely opposed to the Weekums is a group of Yantucks who are trying to seize the moment of post-capitalist despair by broadcasting their spiritual traditions (or a diluted facsimile thereof) through the New Light Corporation.^{xviii} The New Lighters are clearly not this novel’s favored characters, but neither are they completely evil. On the contrary, the book shows tribal people trying—and debating—a range of strategies for sustainability. If Winay is traditional in her stewardship of the remaining plants, she is also ineluctably modern, insisting on keeping a cy (a futuristic television offering smell, taste, and touch as well as audio and video) so that she understands the world around her. Thus, Zobel stages the concurrent exploitation and sustainability of two most precious resources—plant knowledge and spirituality—while showing that they can’t be lifted wholesale out of their original contexts and that, in fact, one doesn’t make sense without the other.

As climate-change fiction, *Oracles* does not participate in the facile apocalypticism that Ursula Heise has critiqued in other environmental novels. Instead, it heralds “the fractious dawn of a legendary age: a time when the Yantuck would remember how to plant and how to fish, how to swim and how to fly” (7). Consistently connecting her Yantuck characters not only to earth, but also to the oceans, the skies, and to human communities across the globe, the novel has what Heise calls a “sense of place and sense of planet.” The story of the Yantuck is peppered with short chapters announcing ancient stories: a Yantuck creation story about the creation of the first trees and people; a Greek story people’s eventual turning away from the trees and birds that are oracles; an Irish story about a giant named Finn McCool; and an ancient Mali story about “little blue beings” who offer deep knowledge that they “were instructed not to share with outsiders, until they were ready for such knowledge” (85). All of these stories have affinities with the characters in the main plot line; but just as importantly, they represent what Heise might call Zobel’s “sustained attempt to develop a narrative architecture that might be able to accommodate a view of global systems along with local stories . . .to address both global ecological risk and global environmental connectedness” (208). They go, perhaps, even further: in reaching toward the stars (“earthly beings,” we are told, “of great wisdom” who have been disguised for their own protection) and in her ability to communicate with the dead, Ashneon participates in cultural narratives and cultural practices that are at the heart of tribal sustainability. In this ethos, intergenerational responsibility is not just about people, not even primarily about people—it is about the planet itself, and the intricate human and other-than-human systems on it, around it, and even beyond it.

Provocatively, Ashneon quits writing. At the beginning of the novel, she is working (like Gladys Tantaquidgeon) with a non-Native college professor, recording the tribe’s medicine traditions. In the tribal museum, however, she begins to discover new “old” forms of knowledge. “[T]he museum was really just woods in disguise,” a place that welcomes mice, spiders and birdsong, and whose largely wooden objects, like the oracle trees of the book’s first ancient story, speak to the young medicine woman: “Now I read objects and they speak volumes. . . .Each artifact’s story holds multiple layers. Books are so primitive” (97). Zobel’s ambivalence about books

suggests the vexed place of written literature in Mohegan cultural and ecological sustainability. Books, after all, are made from trees, and historically, the pulp and paper industry has been an environmentally devastating force in New England, particularly on tribal lands.^{xix} Zobel is never explicit, nor simplistic, about drawing a direct line from books to environmental and cultural destruction. But she and other Mohegan writers retain a healthy skepticism that books are permanent, or that, as Elizabeth Ammons would have it, literature can “save the planet.” They see books, instead, as biocultural resources, dependent on much vaster ecosystems, sometimes contributing to the health of those systems, sometimes implicated in harming them.^{xx}

Zobel further explores the relations among books, humans and trees when she revisits the Yantuck tribe in her 2010 Victorian gothic, *Fire Hollow*. There we meet another beleaguered medicine woman, Jeets Weekum, highly reminiscent of Fidelity Fielding. Jeets won’t have books in her house; but when she dies, her longtime partner, a man who loves his newspapers and has traveled the world as a sailor, sends her adopted grandson, Wolf Weekum, to school. Wolf is dually taught, by a mysterious Irish schoolmaster and his housekeeper, also a Native medicine woman who derides “book nonsense” (92). As the future great-uncle of *Oracles*’s Tommuck, Wolf goes on to become a leader of his people, armed with his literacy and his knowledge of a changing world.

It is a world—southern New England in 1899—under severe environmental stress. The heath hen and black bear are gone; river sturgeon and alewives have become so scarce that everyone is sick of eating oysters (23). This landscape is a product of what environmental historian Carolyn Merchant has described as New England’s second ecological revolution: that period of intense capitalism, from the Revolution to the Civil War, when factories proliferated, creating extreme pollution and resource depletion. New England forests, in particular, were largely decimated during this period, though they would come back in the later nineteenth century, as old agricultural land was abandoned (Merchant 225, Irland 3-5). And yet, like the Winay and Tommuck at the top of the mountain in *Oracles*, the characters in this book sustain highly intimate relationships with trees and with forests. Nettie’s son takes the form of a wooden doll who, at the book’s conclusion in 1989, sits “perched in the south window of the Yantuck Indian Museum, basking in sunlight” (310), reveling in books while “deal[ing] harshly with the wicked and fiercely protect[ing] the good” (311). For the back cover, Mohegan artist William Andrews has drawn a stylized figure that appears to be a medicine woman whose lower body is trunk-like, with deep roots extending into the ground.

Together, *Oracles* and *Fire Hollow* challenge two cherished New England myths: that indigenous people have “vanished” from this region, and that our forests are eternally resilient ecosystems. They seem to ask, can the forests come back after climate change, as they did after the end of large-scale farming? What does forest depletion mean for Mohegan people and Mohegan plant use? How do tribal people sustain their culture and their ecosystems through the depredations of settler colonialism, industrial capitalism, and technological change? Another environmental historian, Tom Griffiths, has said that “[e]nvironmental scientists often move between two timescales. One is a sense of history that goes back only five years, and the other is a sense of geological and evolutionary time that spans millions of years. The time scales in-between—those that represent a human lifetime or the centuries that characterise a society and its land-use practices—are the expertise of the humanities scholar.” Melissa Zobel demonstrates this expertise. She has written stories of indigenous people’s adaptive understandings of the complete interconnections among humans and ecologies, while asking what will be sustained,

by whom, and for whom. If, as Stephanie LeMenager has said, “[n]arrative art will be will be a key actor in establishing the ecological resilience of the human species” (60), *Oracles and Fire Hollow* give indigenous people and indigenous values places of primary importance in imagining sustainability.

Conclusion

A recent study of early environmental protests among the Wabanaki people of northern New England helps amplify a regional indigenous sustainability ethos. Abenaki literary historian Lisa Brooks and her sister Cassandra, a biologist, explain that, by the time of early colonization, Wabanaki people had spent millennia adapting to cycles of scarcity and abundance, moving seasonally among resource bases like forests and oceans, and cultivating these carefully with an eye to the diversity and survival of entire systems. Crucially, the Brookses argue, “Wabanaki people developed a matrix of stories, ceremonies, and subsistence practices that enabled long-term survival in the places to which they belonged” (14). In this context, when Wabanaki leaders in 1839 protested a dam on the Presumpscot River, “this was not just a matter of fishing rights, nor an altruistic concern for the preservation of a species [salmon], but rather a clear responsibility to ensure the continuance of the Presumpscot’s people and the non-human relations with whom their survival was entwined” (17).

If a common critique of today’s sustainability discourse is that it puts “humans” before “nature,” Mohegan writings show not only that these systems are “coupled” (as the NSF would have it) or mutually constitutive (as ecocritics have explained), but that it is settler colonialism, first and foremost, that impedes the sustainability of these interdependent systems. Frank Speck, who spent countless hours with Mohegan medicine women, missed this entirely. In translating Fidelia Fielding’s diary, he focused linguistically on her daily records of the weather and expressions of gratitude toward her Creator, sometimes complaining that these were monotonous, and taking a dismissive attitude toward moments like this:

White men think they know all things. Half the things they are saying not are so.
Poor white men. Many want all this earth. It cannot be for another person to
have anything to eat, because white men want the money. (Speck 247)

Writing on May 23, 1904, Fielding was decrying the poverty and starvation that she and other Mohegans were facing, and writing with exceptional clarity about the source. I like to read her as anticipating the Kari-Oca 2 Declaration, which so strongly condemns the fundamentally colonial drive to commodify the earth’s resources, to profit fewer and fewer people. Fielding makes it just as clear that Mohegan people, too, “have a distinct spiritual and material relationship with our lands,” and that those are “inextricably linked to our survival and to the preservation and further development of our knowledge systems and cultures.” To borrow Stacy Alaimo’s excellent coinage, it doesn’t get much more “transcorporeal” than that. But it also shows that we can’t talk about transcorporeality or sustainability without tackling settler colonialism.

Endnotes

ⁱ (United Nations Division for Sustainable Development) See Agenda 21, Preamble, Sec. 1.3. Agenda 21 has been alternately criticized by environmental activists, on the one hand, for being toothless (see coverage in *ThinkProgress* (Lacey) and *The Guardian* (Monbiot)) and by Tea Party activists, on the other. The latter consider it (in the words of the John Birch Society) a U.N. conspiracy against “your freedom to travel as you please, own a gas-powered car, live in the suburbs or rural areas, and raise a family.”

ⁱⁱ For an excellent introduction to settler colonialism and decolonization, see (Unsettling Minnesota).

ⁱⁱⁱ A brief but widely-cited introduction to sustainability science is Clark and Dickson. For a helpful annotated bibliography of readings in the field, see Kates. A lucid and powerful approach to sustainability as an epistemological concern is Donella Meadows’s *Thinking in Systems*.

^{iv} In *Eco-Republic*, political scientist Melissa Lane contends that one factor preventing individuals from making positive change for sustainability is a sense of “negligibility,”

“the assumption that each agent is so small a player that what he or she individually does in such pursuit doesn’t materially affect the social outcome” (51). In this view, carbon footprint calculators can be powerful mechanisms for individuals and communities to become affectively engaged with the environmental good.

^v Cited in the thorough historical overview of international sustainability discourse provided by Tom Kelly in his introduction to Aber et al., *The Sustainable Learning Community* (35–37). Scholars working in environmental justice have been quite amenable to sustainability discourse: e.g., Vandana Shiva, who insists on the rights of the global south to liberation from development; Debora Bird Rose, who sees ecocide as part and parcel of genocide; Winona LaDuke, who ties together her work in food sovereignty, renewable energy, and cultural self-determination for Ojibwe people; and Wangari Maathi, whose nomination for the 2004 Nobel Peace Prize was initially questioned, on the grounds that leading Kenyan women to plant trees could not be as important as male heads of state fighting terrorism or nuclear proliferation.

^{vi} For a more developed history of this term at the level of international policy, see Thomas Kelly.

^{vii} “Screed” is a term I use advisedly: “suddenly,” Kingsnorth concludes, “never-ending economic growth was a good thing after all: the poor needed it to get rich, which was their right . . . we were told that ‘social justice and environmental justice go hand in hand’—a suggestion of such bizarre inaccuracy that it could surely only be wishful thinking.”

^{viii} For example, the Sustainability Solutions Initiative at the University of Maine Orono, which brings together cultural anthropologists, Penobscot basketmakers, foresters and scientists to try to prevent or adapt to a potential invasion of the emerald ash borer, which attacks ash trees used in indigenous baskets and other cultural productions.

^{ix} For an overview of Mohegan history, see Melissa Zobel’s (nee Melissa Fawcett) winningly-titled *Lasting of the Mohegans*. For fuller discussions of Fielding and Tantaquidgeon, see (Senier).

^x The reticence of medicine people under colonialism, and the rarity of colonial-era writing about traditional healing, is discussed in (Mancini, “Native Medicine and the Powwow”) and (Mancini, “Native Medicine and the Pauwau, Part 2”).

^{xi} On biopiracy, see Winona LaDuke.

^{xii} The herbal is in the Dartmouth College archives; Joanna Brooks has transcribed and annotated the full text in her edition of Occom’s complete writings. A portion of it, in manuscript form, can be viewed online in the Dartmouth Library Digital Collections. For other discussions of the herbal, see (Mancini, “Native Medicine and the Pauwau, Part 2”) and (Wisecup).

^{xiii} Mary Louise Pratt has argued that the eighteenth century made everyone a naturalist, Linnaeus having helped to “set in motion a secular, global labor that, among other things, made contact zones a site of intellectual as well as manual labor, and installed there the distinction between the two (26). But Occom is no “imperial historian,” to use Paul Carter’s phrase for travel and nature writers in this period (Carter

20). He shares more, perhaps, with earlier herbal writers of medieval Europe, for whom, as Leah Knight puts it, “a culture of plants and a culture of texts met” (xi).

^{xiv} (Fielding)

^{xv} By then, Occom had joined the emigration to Oneida territory in upstate New York, as part of the Christian Brotherton Indian community. Several Native people in that region had built significant ginseng businesses, including David Fowler (another Montauk, and another supposed assimilated student of Eleazar Wheelock) and an Oneida woman named Sally Ainse. See Brooks 317-18 n. 133 and MacLeitch 220.

^{xvi} As my discussion of *Oracles* shows, Mohegan people themselves have vigorous debate about casinos. I won't adjudicate such debates any further in this essay, but direct readers who are interested in a cogent critique by a Native American writer to Gerald Vizenor's essay on “mercenary sovereignty.”

^{xvii} Anna Lowenhaupt Tsing offers a fascinating analysis of how indigenous people in Indonesia appropriate “green development fantasies” to position themselves as “tribal elders,” in hopes of building alliances with conservation-minded westerners to protect natural resources

^{xviii} An amusing play on “New Lights,” the evangelicals in the Great Awakening of 1740s. Eleazar Wheelock was a New Light minister

^{xix} Perhaps the most visible case has been the Penobscot nation's fight in Maine against Lincoln Pulp and Paper's poisoning of the Penobscot River, the history of which is well documented on the website for the Penobscot River Restoration Trust. The global conglomerate International Paper, founded in 1898, is headquartered in Stamford Connecticut.

^{xx} Stephanie LeMenager has made a similar point about contemporary books, heavily dependent on petroleum products: the resins and oils that make up the ink; the diesel fuel needed to transport paper and finished books; the natural gas and oil that power and help house press equipment. She concludes, “To step outside of petromodernity would require a step outside of media, including the contemporary printed book” (64).

Works Cited

- Aber, John, Tom Kelly, and Bruce Mallory. *The Sustainable Learning Community: One University's Journey to the Future*. Hanover: University of New Hampshire Press, 2009. Print.
- Alaimo, Stacy. *Bodily Natures: Science, Environment, and the Material Self*. Bloomington: Indiana University Press, 2010. Print.
- . “Sustainable This, Sustainable That: New Materialisms, Posthumanism, and Unknown Futures.” *PMLA: Publications of the Modern Language Association of America* 127.3 (2012): 558–564. Print.
- Ammons, Elizabeth. *Brave New Words: How Literature Will Save the Planet*. Iowa City: University Of Iowa Press, 2010. Print.
- Brooks, Lisa. *The Common Pot: The Recovery of Native Space in the Northeast*. Minneapolis: University of Minnesota Press, 2008. Print.
- Brooks, Lisa, and Cassandra Brooks. “The Reciprocity Principle and Traditional Ecological Knowledge: Understanding the Significance of Indigenous Protest on the Presumpscot River.” *International Journal of Critical Indigenous Studies* 3.2 (2010): 11–28. Print.
- Carter, Paul. *The Road to Botany Bay: An Exploration of Landscape and History*. Minneapolis: University of Minnesota Press, 2010. Print.
- Cheney, Helen, Natalina Nheu, and Lorien Vecellio. “Sustainability as Social Change: Values and Power in Sustainability Discourse.” *Sustainability and Social Science: Roundtable Proceedings* (2004): 225–247. Print.
- Clark, William C., and Nancy M. Dickson. “Sustainability Science: The Emerging Research Program.” *Proceedings of the National Academy of Sciences of the United States of America* 100.14 (2003): 8059–8061. Print.

-
- Cronon, William. "The Trouble with Wilderness; or, Getting Back to the Wrong Nature." Web. 15 Sept. 2011. http://www.williamcronon.net/writing/Trouble_with_Wilderness_Main.html
- Fawcett, Melissa Jayne. *The Lasting of The Mohegans Part I: The Story of the Wolf People*. The Mohegan Tribe, 1995. Print.
- Fielding, Stephanie. "Mohegan Language Project." Web. 6 Aug. 2012. <http://www.moheganlanguage.com/>
- Geniusz, Wendy Djinn. *Our Knowledge Is Not Primitive: Decolonizing Botanical Anishinaabe Teachings*. Syracuse: Syracuse University Press, 2009. Print.
- Griffiths, Tom. "The Humanities and an Environmentally Sustainable Australia." *Australian Humanities Review*. Dec. 2007. Web. 6 Aug. 2012. <http://www.australianhumanitiesreview.org/archive/Issue-December-2007/EcoHumanities/EcoGriffiths.html>
- Harkin, Michael E., and David Rich Lewis. "Introduction." *Native Americans and the Environment: Perspectives on the Ecological Indian*. Ed. Michael E. Harkin and David Rich Lewis. Lincoln: University of Nebraska Press. xix–xxxiv. Print.
- Harré, Rom, Jens Brockmeier, and Peter Mühlhäuser. *Greenspeak: A Study of Environmental Discourse*. Sage Publications, 1999. Print.
- Heise, Ursula K. *Sense of Place and Sense of Planet: The Environmental Imagination of the Global*. New York: Oxford University Press, USA, 2008. Print.
- Irland, Lloyd C. *Wildlands And Woodlots: The Story Of New England's Forests*. Hanover: University Press of New England, 1982. Print.
- John Birch Society. "Choose Freedom: Stop Agenda 21." Web. 27 June 2012. <http://www.jbs.org/issues-pages/stop-agenda-21>.
- "KARI-OCA 2 DECLARATION | Indigenous Peoples 4 Mother Earth @ Rio+20." Web. 27 June 2012. <http://indigenous4motherearthrioplus20.org/kari-oca-2-declaration/>
- Kates, Robert W., ed. *Readings in Sustainability Science and Technology*. CID Working Paper No. 213. Cambridge, MA: Harvard University Center for International Development, 2010. Print.
- Kingsnorth, Paul. "Confessions of a Recovering Environmentalist." *Orion* (2012): n. pag. Web. 21 June 2012. <http://www.orionmagazine.org/index.php/articles/article/6599>
- Knight, Leah. *Of Books and Botany in Early Modern England: Sixteenth-Century Plants and Print Culture*. Ashgate Publishing, Ltd., 2009. Print.
- Lacey, Stephen. "Perspectives From Rio+20: 'We Cannot Conflate The Negotiations With What Is Actually Happening On The Ground'." *ThinkProgress*. 25 June 2012. Web. 27 June 2012.
- LaDuke, Winona. *Recovering The Sacred: The Power Of Naming And Claiming*. Cambridge: South End Press, 2005. Print.
- Lane, Melissa. *Eco-Republic: What the Ancients Can Teach Us About Ethics, Virtue, and Sustainable Living*. Princeton, NJ: Princeton University Press, 2011. Print.
- Latour, Bruno. *We Have Never Been Modern*. Cambridge: Harvard University Press, 1993. Print.
- LeMenager, Stephanie. "The Aesthetics of Petroleum, After Oil!" *American Literary History* 24.1 (2012): 59–86. Print.
- MacLeitch, Gail D. *Imperial Entanglements: Iroquois Change and Persistence on the Frontiers of Empire*. Philadelphia: University of Pennsylvania Press, 2011. Print.
- Mancini, Jason. "Native Medicine and the Pauwau, Part 2." *Cross Paths* (2004): n. pag. Web. 21 June 2012. <http://www.pequotmuseum.org/Home/CrossPaths/CrossPathsSummer2004/NativeMedicineandthePauwau.htm>
- . "Native Medicine and the Powwow." *Cross Paths* (2004): n. pag. Web. <http://www.pequotmuseum.org/Home/CrossPaths/CrossPathsSpring2004/NativeMedicineThePowwow.htm>
- Meadows, Donella H. *Thinking in Systems: A Primer*. White River Junction, VT: Chelsea Green Publishing, 2008. Print.
- Mentz, Steve. "After Sustainability." *PMLA* 127.3 (2012): 586–592.

-
- Merchant, Carolyn. *Ecological Revolutions: Nature, Gender, and Science in New England*. Chapel Hill: University of North Carolina Press, 1989. Print.
- Monbiot, George. "Rio+20 Draft Text Is 283 Paragraphs of Fluff." *The Guardian* 24 June 2012. Web. 24 June 2012.
- Newton, Julianne Lutz, and Eric Freyfogle. "Sustainability: A Dissent." *Conservation Biology* 19.1 (2005): 23–32. Print.
- O'Grady, John P. "How Sustainable Is the Idea of Sustainability?" *Interdisciplinary Studies in Literature and Environment* 10.1 (2003): 1–10. Print.
- Occom, Samson. *Manuscripts Relating to Samson Occom and Eleazar Wheelock's Early Indian Students, 1740s-1790s*. Rauner Special Collections, Dartmouth College. <http://www.dartmouth.edu/~library/digital/collections/occom-samson/index.html>
- Occom, Samson, and Joanna Brooks. *The Collected Writings of Samson Occom, Mohegan: Literature and Leadership in Eighteenth-Century Native America*. New York: Oxford University Press, 2006. Print.
- Philippon, Daniel. "Sustainability and the Humanities: An Extensive Pleasure." *American Literary History* 24.1 (2012): 163–179. Print.
- Pratt, Mary Louise. *Imperial Eyes: Travel Writing and Transculturation*. London: Routledge, 2007. Print.
- Ranco, Darren. "The Indian Ecologist and the Politics of Representation: Critiquing the Ecological Indian in the Age of Ecocide." *Perspectives on the Ecological Indian: Native Americans and the Environment*. Ed. Michael Harkin and David Rich Lewis. Lincoln: University of Nebraska Press, 2007. 32–51. Print.
- Senier, Siobhan. "'Traditionally, Disability Was Not Seen as Such': Writing and Healing in the Work of Mohegan Medicine People." *Journal of Literary and Cultural Disability Studies* 7.2 (2013): 213–229. Print.
- Silka, Linda. "Community Research in Other Contexts: Learning from Sustainability Science." *Journal of Empirical Research on Human Research Ethics* (2010): 3–11. Print.
- Speck, Frank Gouldsmith. *Native Tribes and Dialects of Connecticut: A Mohegan-Pequot Diary*. Washington, DC: U.S. Government Printing Office, 1928. Print.
- Speth, James Gustave. *The Bridge at the Edge of the World: Capitalism, the Environment, and Crossing from Crisis to Sustainability*. New Haven: Yale University Press, 2008. Print.
- Tantaquidgeon, Gladys. *Folk Medicine of the Delaware & Related Algonkian Indians*. Harrisburg: Pennsylvania Historical & Museum Commission, 2000. Print.
- Titon, Jeff Todd. "Music and Sustainability: An Ecological Viewpoint." *World of Music* 51.1 (2009): 119–139. Print.
- Tsing, Anna Lowenhaupt. "Becoming a Tribal Elder, and Other Green Development Fantasies." *Transforming the Indonesian Uplands*. Ed. Tania Murray Li. New York: Routledge, 1999. 159–202. Print.
- United Nations Division for Sustainable Development, Department of Economic and Social Affairs. Agenda 21. Dec. 1992. Web. 27 June 2012.
- Unsettling Minnesota. *Unsettling Ourselves: Reflections and Resources for Deconstructing Colonial Mentality*. <http://unsettlingminnesota.org>. 2010. Web.
- Vizenor, Gerald. "Mercenary Sovereignty: Casinos, Truth Games, and Native American Liberty." In Josef Raab and Martin Butler, eds. *Hybrid Americas: Contacts, Contrasts, and Confluences in New World Literatures and Cultures*. Tempe, AZ: LIT: Bilingual Press, 2008. 129–141. Print.
- Wood, Gillen D'Arcy. "What Is Sustainability Studies?" *American Literary History* 24.1 (2012): 1–15. Web. 24 Jan. 2012.
- World Commission on Environment and Development. *Our Common Future: Report of the World Commission on Environment and Development*. Oxford: Oxford University Press, 1987. Web. 27 June 2012.
- Zobel, Melissa Tantaquidgeon. *Fire Hollow*. Raven's Wing Books, 2010. Print.
- . *Oracles: A Novel*. Albuquerque: University of New Mexico Press, 2004. Print.