

## **Haint Stories Rooted in Conjure Science:**

### **Indigenous Scientific Literacies in Andrea Hairston's *Redwood and Wildfire***

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Several years ago Robert Warrior (Osage) spoke at the Native Student and Community Center at Portland State University in Oregon. Almost digressing from his prepared comments on social justice issues, he brought up his advocacy for the decolonization and restoration of Freedman peoples to their Cherokee bands and for recognition of Seminole Black Indians as accepted members of the Seminole Nation. Was he amplifying his own views in “Native Critics in the World,” or echoing Taiaiake Alfred’s *Peace, Power and Righteousness: An Indigenous Manifesto* (2009)? Both sources call upon a new generation of Native leaders who will work toward decolonization “in concert with the restoration of an indigenous political culture within our communities...not a matter of nostalgia, or any other uncritical attempt to capture the past in the present” (Alfred 143-44). Restoration is, in Warrior’s rephrasing of the idea, “a sincere attempt to find ways to use insights, practices, and structures from our Indigenous traditions as the basis for contemporary forms of democratic polities in the Native world” (Warrior 208).

A good bit of internal conflict and controversy exists in the broad Native community on these issues. Advocating for restoration of status to so-called “Black Indians” and decrying recent attempts to legally disenfranchise currently enrolled tribal members who share African and Native heritage amounts to openly reprimanding the Cherokee, the Seminole, and many other Nations. As he humbly spoke to us about how one cannot ask another nation to shift its policies generally, he acknowledged moments, civil rights moments, that require speaking out, and he had chosen this moment to bear witness. Witnessing Professor Warrior’s reaction to his Portland audience’s wholehearted endorsement was therefore amusing. He probably did not

realize that a Black Indian who had recently discovered his Native heritage had anonymously donated substantial seed money for the very Center he was speaking in that afternoon. Nor did he know that Portland State's Indigenous Nations Studies Program is closely affiliated with our Department of Black Studies in the ongoing development of a graduate degree in Gender, Race, and Nation. In fact, our chair of Black Studies, Kofe Agorash, is an African archeologist famed for his digs in Jamaica that have established the direct ancestral lineage of the Maroons to the Taino/Arawak, as run-away African Diasporic slaves joined communities of Indigenous peoples who sought safety from colonial enterprises by living in remote parts of the Jamaican mountains. Nor could he have known that this particular audience included members of a literary studies class on Indigenous science fiction who had been busy consuming Andrea Hairston's "Griots of the Galaxy" (2004) and *Mindscape* (2006) and would soon be reading her *Redwood and Wildfire* (2011) which I was fortunate enough to have in manuscript form prior to its release the next spring. *Just wait*, I told my students, *until you get to hear the story of Aidan*.

We had the great honour of inviting Andrea Hairston and Pan Morigan to give a reading and performance at that very same Native Student and Community Center once *Redwood and Wildfire* was released. Andrea's "readings" are mesmerizing *performances*, and in this case she and Pan were introduced by the ceremonial drumming and singing of Indigenous Nations Studies Director Cornel Pewewardy (Comanche), while Pan later accompanied Andrea's spoken words with music and song.

In *Bodies in Dissent: Spectacular Performances of Race and Freedom, 1850-1910* (2006), Daphne A. Brooks chronicles the performance tradition that Andrea Hairston extends into the present generation. Describing the careers of Aida Overton Walker and Pauline Elizabeth Hopkins, Brooks writes, "They shared much in their visions of how black women

might utilize performance as a place from which to explore and express the social, political, and sexual politics of black womanhood in America. In the midst of this fruitful era when leading black female activists conjoined the political with the aesthetic in myriad ways and forms, Hopkins and Walker experimented with classic and Pan-Africanist aesthetic practices to imagine how performance culture might serve as a site of revision and self-making for black women and their overdetermined bodies in the cultural imaginary” (286). It is worth noting at the outset of this analysis of *Redwood and Wildfire* that Hairston casts Aida Overton Walker as a walk-on in the narrative, where she takes in Redwood, Aidan, and Saeed’s performance; in turn, a worn-out copy of Hopkins’s fantastic SF adventure novel *Of One Blood* (1903) makes its appearance, a marker of influence on Redwood’s sister Iris, on Aidan, and obviously on Hairston herself.

*Redwood and Wildfire* has been categorized as an “historical novel” but is better recognized as a renewed form of the speculative novel; a renewed form of the speculative novel that emphasizes conjuring as science, science as conjuring explicitly. Conjuring, all too often described as a form of magic, might be argued to be in opposition to scientific thought. However, China Miéville’s writings, sometimes categorized as the New Weird, are, as the author himself states, additionally about “magicking science” and his work is steadily studied in the top-peer reviewed journals of the SF field. Less noted but still implicit is his experimentation with Indigenous thinking and sciences more directly in his SF/New Weird novels, *The Scar* (2002) and *Embassytown* (2011), the former in a parallel world of Bas-Lag and the latter in a futuristic discovery of a species on a world of truly alien tongue and speech ([Extrapolation](#) article). Even on the backflap of Nnedi Okorafor’s *Who Fears Death?* (2010), some reviews identify the novel as a future apocalyptic fantasy, but Okorafor assures audiences and readers in a recent WisCon Guest of Honor speech of her distinctive use of science in this novel, her fascination from

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childhood with classification and the science of animals/insects/fauna and her Nigerian uncle's concept of science as "magic" (*WisCon* 198). Nalo Hopkinson accomplishes an Afro-Canadian and Caribbean Islander re-mix of Taino/Arawak stories in the midst of the organically constructed science of post-cyberpunk novel, *Midnight Robber* (2000) but, along with her bulk of SF thought experiments, was more recently termed as a "cross-fabulist" who mingles SF, Horror, and Fantasy, in the *L.A. Times* article establishing her credentials of her recent tenure-track Creative Writing and Science Fiction position at the University of California, Riverside. These dynamic shifts in the SF field, recognizing the science of more than Eurowestern ways of thinking along with numerous other examples such as Indigenous science fiction stories<sup>1</sup> express better the stance of Andrea Hairston's forms of conjuration as science and embedded experiences of life itself, or as Andrea herself might term it as she reminds us in all her work, art as a Spectral Aesthetic from a polyrhythmic perspective (*Big Daddy* 237).

The overall feel of *Redwood and Wildfire* undermines the late nineteenth/early twentieth century pulpish but electrifying adventures of American Edisonades without resorting to closely intertextual satire, such as evidenced in Joe R. Lansdale's wickedly funny "The Steam Man of the Prairie and the Dark Rider Get Down: A Dime Novel." Hairston's novel instead emphasizes both the agency and presence of Native and African-American sciences intertwined with art via the use of African diasporic, African-American, and Native Indigenous methodologies and epistemologies.

Her main characters in this aesthetic of interminglings are a young black woman, Redwood Phipps, and a half-Irish, half-Seminole man, Aidan Wildfire. Events take place primarily in rural Georgia and Chicago between 1898 and 1913. The main actions of the narrative involve responses to the lynching of Redwood's mother, "Miz Garnett," by a white

mob. Miz Garnett was a well-regarded “conjurer” whom the white community viewed as a healer. When she killed the white man who raped her, their affiliations became clear. Miz Garnett becomes a “Haint” to young, quaking Aidan, who witnessed the lynching and will be forever tormented by his guilt for failing to intercede. But this horrific event ultimately inspires Aidan to recover his own Native identity and to preserve memories of his Seminole’s father’s stories and languages of Seminole, Cherokee and Muskogee Creek, as well as his Irish mother’s Gaelic and family stories. Miz Garnett had taught Aidan as a boy to write down these stories in a red-leather bound journal, which she characterized as “the good medicine” that will keep his mind and heart open. Sea Gullah Islanders, such as Miz Garnett and Miz Subie, who becomes Redwood’s mentor for conjuring; Cherokees, Seminoles, and Creeks, all emphasize the power of literacy, since all their cultures have faced sequestration, lynching, and erasure if found reading or understanding words in print.

A decade after the lynching, Redwood has grown into a woman as capable of conjuring as her mother had been. While Aidan’s guilt has wasted his gifts and led him to alcoholism and failed marriages, his friendship with Redwood greatly increases her powers, as demonstrated by a signature event that reappears throughout the novel: Redwood’s ability to capture a thunderstorm in her fist. Aidan and Redwood are soul-mates, kept apart by the illegality of interracial marriage in the South.

Yet another tragic event carries forward the narrative. Redwood is raped by Jerome, a former plantation owner’s son who represents white desire to reclaim Cherokee and Choctaw lands and the properties of the colored folk of Peach Grove, including the Phipps’s acreage, treaties and mortgage papers denied. While she accidentally kills him by conjuring with her thunderstorm fist, she knows that she risks the same fate as her mother by staying in Georgia,

and thus begins a trek to Chicago. Underscoring the element of performance discussed previously, she becomes a singer in a traveling show, and finds her place in the theater and film businesses that were hallmarks of Chicago's cultural identity at that time. Aidan follows a number of years later, bringing along Redwood's younger sister Iris. Together, they work on stage and in films. Redwood sings in choruses and picks up "African savage" parts; Aidan is cast in multiple roles as the "Noble Indian Savage." These compromises keep them working, ultimately giving them access to a wealthy middle- and upper-class black community in Chicago along with the more mixed communities springing up so quickly as a true historical resonance. Redwood's conjuring which she gifts freely gains her stature as a healer in this community, where she and Aidan find the funds necessary from their acting and carpentering to realize her dream of making a film by and for diasporic and Indigenous peoples, a dashing Sea Islander adventure and romance of an interracial marriage called simply *The Pirate and the Schoolteacher* based in a more realistic setting, Hog Hollow, a Sea Island town off the coast of Georgia.

Throughout the novel, rather than a series of oppositions: science versus magic, minority cultures versus dominating culture, the reader soon senses what Arnold Krupat (Cherokee) terms a "double-sidedness of reality." Unlike the rhetorical figure dealing in contraries, a Western discursive practice, this "double-sidedness of reality" has different things "*appear to belong together, both subversive and normative*" {Krupat's italics}, Native philosophy<sup>2</sup>, suggests not an antagonistic relationship of supremacy between them but an emphasis, rather, of balance and complementarity, a "dynamic and relational perspective" much like Hairston's polyrhythmic perspective (Krupat 10-13). So, the science of conjuring and imagination is explored in Aidan and Redwood's relations to each other and to all others intertwined. Redwood is the spread out

and simultaneously rooted one, a healer, a dancer, singer, actress, root digger, and transformer; she can, in fact, embody animals, feel animals *be* such as the mediating of Scar the bear scrounging for food at a Peach Grove picnic and a she-lioness beaten and finally slaughtered by anxious on-set practitioners in spite of Redwood's heroic efforts to save her life. She can also transform others during dances, songs, and moments of receptiveness of celebration and joy. Aidan complements her conjuring skills with an open heart, open mind; he is musician, composer of songs, and singer, an eager farmer practicing Indigenous Scientific Literacies, a medicine bag keeper, and a serious writer journaling life experiences frequently.

In his own memoir *Living Out Loud* (2009), Cornel West details conjuring of this kind of breadth. As a young Baptist-going by and born-again Christian, he experienced a life-threatening asthma. Madame Marie, the "voodoo lady" has workable remedies for him, a one-room home of root, peppers, and beads hanging from her ceiling like Miz Subie's in *Redwood and Wildfire*, strung with herbs and good medicines that Redwood and Aidan have gathered for her. West credits Madame Marie's healing with a conjuring cure, incomprehensible language (most likely, Miz Subie's Sea Gullah tongue) and blessings which shift him in a "more ecumenical direction [where he] began to understand that answers to problems-physical, emotional, spiritual-often require enquiries that go beyond the confines of narrow dogma" (33-35). This kind of double-edged reality has room for African Baptists, Cherokee, Creek, Seminole, and Sioux Christians while opening up avenues for Africana and Indigenous ways of thinking and ceremony, *aadizookaaanan*, sacred knowledge in my own tongue. Clarissa, Redwood's sister-in-law, a composed urbane and urban upper-middle class African American who holds to the "uplift" model of Booker T. Washington, and on their first meeting of her holds rigid views on conjuring or hoodooing of any kind transforms so strongly that Aidan is startled to

see “hoodoo talk coming out Clarissa’s good Christian mouth” as she declares...” if the good Lord sees fit to let us help one another this way, then who am I to argue?” (427)

Raymond Fogelson (Cherokee) notes that by the beginning of the 1960s to today among Eastern Cherokees, “all of today’s conjurerers consider themselves to be good Christians and feel their work is completely consistent with Christian doctrine” and adds “the close rapport between Christianity and conjuring does not seem to be a recent event, since much of Mooney’s best material came from persons who combined the profession of native doctor with Sunday school preacher” (Krupat 219-220). This thinking in **James Mooney’s *Myths of the Cherokee*** published as a Bureau Ethnology Report in 1900 is repeated by Robert Conley’s (United Keetoowah Band of Cherokee) explanation of *Duyulta*, a moral code translated as “the right way” or “the path of being in balance.” This interpretation reiterates something the medicine people say:

What does being in balance mean? It is the traditional Cherokee way of living: placing importance on the good of the whole more than the individual; having freedom but taking responsibility for yourself; staying close to the earth and all our relations. And how does one do this? By taking time to dream; by understanding our nature and our needs and taking care of them; by doing ceremonies that keep us in balance like going to water and using the sweat lodge; by listening and praying; by recognizing our dark and light sides; by having the support of family, extended family, clan, and tribe. The medicine people say it requires understanding ourselves and our place in the world around us. (Teuton 199)

When Redwood dream travels before conjuring, shares the ceremonial mid-summer First Fruits and green corn ceremony and sweat lodge with Aidan as an extended “family” member of

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his Seminole clan, there is no contradiction in the sense that her Peach Grove Baptist minister and the African Methodists, shooing her away with shovels and guns while Sequoia (Redwood's stage name) travels north with Milton and Eddie as part of the "Act," seem to feel. Redwood/Sequoia's "Master of Breath" is also God; "God had mercy on her. God might even forgive her too, 'cause once she was beloved by the spirit on everything" (*Redwood and Wildfire* 151). This belief rings true consistently with many Native bands including Creek. Craig Womack (Muskogee Creek), aligns the areas of Creek Baptist Church and conjurer woods grounds with an actual creek/river flowing as running water over stones, the "place where we touch medicine" (*Art as Performance* 308). In the traditional circles the balancing of *Ofunka*, Creator and the Christian (here, Baptist) God, *Hessaketemmessee*, remains no riddle (314-15). The opening scene of *Redwood and Wildfire* and intertwined histories of red and black are established almost immediately by the first eighty-five years-ago story of Peach Grove Colored folk. The House of the Lord built by slaves in the starlight after sweating and groaning all day re-appear in story-form in 1898. "[H]alf these devout slaves, filled with the spirit of the Holy Ghost, took their freedom into the swamps and onto Florida to live and die with the Seminoles"... "Paddy rollers chasing behind them got struck down by lightning, and their hound dogs got fried too. Overseer aimed to torch the church but set fire to his own self-man ran 'round for hours, burning everyone he touch, and nobody could put him out. Even if this was a tall tale, the angry God of the Baptists made Aidan nervous" (6-7). Unlike the historical film *Hearts in Dixie* (1929), which hosts an all-black cast, portrays conjuring but plays it safe for a white Hollywood audience by deconstructing the abilities of the conjure woman, Hairston's novel includes a film, *The Pirate and the Schoolteacher*, directed by Redwood, written by Iris, and re-inscribed by Aidan in his

red leather journal, which encompasses the effective conjuring of doctoring and healing with Seminole and Sea Gullah cross-roads medicines.<sup>3</sup>

Abbaseh, the Persian sister-in-law of Saeed, inquires about a red pouch, faithfully worn in this film and more ambiguously, a bag at either Redwood's or Aidan's side most of the time, reveals this type of cross-roads and soft translations going on all the time in the novel as a whole. Milton describes it as a west African and Sea Gullah islander conjuring "mojo, a prayer in a bag" whereas Rose, Seminole distant cousin of Aidan, of the *Hutalglagi* Wind Clan, refers to it as an Indigenous "medicine bag, holding you to a promise" (*Redwood and Wildfire* 435). This complexity, then, is not a monolithic blur but a cascade of a "polyrhythmic perspective" with readers expected to note even these small details of variety.

As already evidenced in the novel, conjuring as science may be multiple layers including not merely its symbiogenesis and co-evolution, in quantum mechanics and organic physics terms (spelled out explicitly in her SF novel *Mindscape*), but also forms of conjuration such as reading, writing, and literacy in general, for as Aidan reminds his friend Walter Jumping Bear: "writing myself down, it's – a hoodoo tonic spell" (404). Further, *Redwood and Wildfire* conjures aspects of Indigenous Scientific Literacies and the inversion of environmental hegemony, now acknowledged as environmental justice with an awareness of economic inequalities and racial groups whose homes bear the brunt of environmental degradation. Finally, conjuring is changing the weather as Redwood does with her storm fist, as time travel, as dance and songs of celebration, and as, love, the love of *anogethka*, a Creek rendering of a participatory act, calling things into *being*, and enacting relationships (Womack 308). These conjurings, although Redwood and Miz Garnett seem to be most skilled in the novel, are fully attributed to *Isti Seminoli*, free people, whether the freed people of long ago gone off to join the Seminoles,

freedman of Cherokee, Choctaw, Chickasaw, and Muskogee Creek peoples, black and brown liberated together, or the main characters of this novel, colored folk, Indians, Persians, Dahomeans, Abyssians, and/or mixed such as the Black Indian elderly guide, “colored and Indian too” who fills Aidan in on the Buffalo Bill Wild West show at the Chicago Exhibition Fair of 1893.

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Aidan writes and records sampling of this kind of mixing: stories of his and Redwood’s 1903 travel back ten years in time to the Fair, stories about his great-great Muskóki Creek ancestor, Okefenokee, Trembling Earth, born on a floating island, “A Time Before Time,” stories from his Seminole father, Big Thunder such as “Walking the Stars,” “stories and songs medicine too,” tales from his Irish mother, Aislinn O’Casey, a “story spell,” his own “medicine work” for Miz Garnett of the “Cherokee *nunnehi*, invisible spirit people, liv[ing] inside the mountain and also the tiny *Yunwi Tsunsi*. Perhaps the fairies of Ireland too” and growing up in his youth by *The Enchanted Land* of the Cherokees, Blood Mountain, and the Blue Ridge Mountains where the 1883 *Pace vs. Alabama*, race-based legal restriction on marriage is disregarded, where his parents marry traditionally in the Seminole way in 1876 and slip away to these communities, where a mother’s white sea shell is given to Aidan on Cherokee-sacred Mount Enotah, “*isti seminoli*, free folks, coloured and Indian, where “all sorts of free folks were mixing ‘round up there in them mountains,” where one celebrates first fruits, lights new fires and forgives what can be forgiven (*Redwood and Wildfire* 47, 57-60, 101, 157, 231-233, 345-346, 435).

While the European privileging of an alphabetic writing system interrupted the oral, graphic, and critical impulses of Indigenous peoples in the Americas, memory as well as recordings are famously enunciated by Sequoyah, whose English name was George Guess, the nineteenth century “American Cadmus” often described as “inventing from scratch a written

language through “idea diffusion”; his “talking leaves” culminate in eighty-five signs of the Cherokee syllabary taking twenty years to create. More recently in Native scholarship the thinking that this came from a much older language, one used by the ancient priesthood called the Ani-Kutani and a “continuing legal force of a long established, deeply embedded and widely dispersed language of racism directed at Indians,” as Robert Conley, Chris Teuton and Lisa Brooks conceive it, strongly suggest attempts to eradicate the knowledge of Indigenous recorded and written systems of language. Elias Boudinot, in 1828 as first editor of the *Cherokee Phoenix* (still running today) points out even then that the Cherokees and other Native peoples had been misrepresented by whites as static primitives locked in time, when they, in fact, had changed over time like whites themselves. Cherokees had been hesitant to re-incorporate “talking leaves” with the corruption of the former priesthood and their necessary decimation by the remaining strands of administration: war chiefs, peace chiefs, and medicine peoples but the Cherokees very quickly post-Civil War found the first free, compulsory public school system in the country, perhaps in the world, education becomes the highest single line item in the Cherokee Nation’s budget and by 1907, the Cherokee Nation had produced more college students than the states of Arkansas and Texas combined, all youth learning from literary sources, and grandparents and elders in both English and Cherokee (Teuton 3-22, 190-196).

Aidan’s ability to read and write so easily may well have been linked to this kind of outreach in Cherokee education since their lands contained his home until he was eleven or twelve. The conjuring roles of the healers of people hurt and sick also reformed into the roles of the keepers of public ceremonies and charge of old stories, graphically and orally (or the original division towards the Ani-Kutani keeping records). This role included as Aidan does very often with his mule Princess, the bear Scar, or any other animal-person he runs across, singing to the

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animals and copying their steps and manners to better communicate with them as well (Teuton 199-205). Miz Garnett's first advice to Aidan is to write all of life in story form in his red leather journal, Miz Subie's Sea Gullah islander friend reminisces about Miz Subie's willingness to die pre-Civil War by learning to read, a right banned to all slaves, and Iris's fierceness and love of all books and writing, determined to be a journalist one day while writing their movie/play film script.

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Reading *and* writing become powerful conjuring and healing spells among those who have experienced either the reluctance by general audiences to admit to one's own peoples' histories of writings and/or who have been stridently banned from either learning to read in their own tongue such as Rose who attends a compulsory boarding school or who have been banned from it such as Miz Subie. Such actions represent the essence of racialized relations embedded in the formation of imperialism and conquest and slavery as racial formation scholars such as Michael Omi and Howard Winant establish.<sup>4</sup> Lawanda Kitt in the futuristic *Mindscape* speaks of this "spiritual assault" on the enslaved and conquered, Africana and Indigenous peoples, for over 500 years.

Conjured healings with Indigenous Scientific Literacies and Embedded forms of knowledge open the novel to a further look at some of the misuse of land practices leading to and including the period of 1898-1913. Hairston's choice of timeline for the novel would directly align her with research on the post-Civil War rise of mechanized industry and its ill effects on "freedmen" and Indigenous communities. There are ample instances in literature that show slaves finding themselves transformed into crossbreeds.<sup>5</sup> Consistently in this tradition, "conjure women," like Hairston's Redwood, help to mitigate or to exacerbate the effects. Charles Chesnutt praises W. E. B. Du Bois's efforts to highlight increasing debt peonage, refuses to

“pass” although friends urge him to do so, and chooses to write controversially on environmental catastrophes of his day (Crouch 143-44). In Chesnut’s story “Po’ Sandy,” a conjure woman turns her husband into a tree so that he can remain on the plantation, yet ironically he is cut down; bound and screaming, the conjure woman is forced to bear witness to the dismemberment of both husband and forest “in a metonymic whirr of ecosublime terror and shock” (Rozell 24-28). Such stories suggest the ecological context of the period between 1860 and 1900 when poverty-stricken Southerners drained swamplands on a massive scale to access fertile soil, cut remaining virgin timber, and maintained agriculture on a landscape depleted of sufficient nutrients to sustain crops. These stories thus explore relationships between exploited African Americans and natural environments plagued with misuse in the developing South (Rozell 24 and Paul Outka 103-107). Throughout the novel, glimpses of this exploitation occur: the devastation of the tree lines at Mount Enotah when Redwood, Milton, and Eddie travel there is already abundant compared with Aidan’s childhood memories(156); the pollution, clogged mud and dirt and extreme noises of the Chicago stockyards reverberate; even their film site located outside of Chicago reveals “greasy rain off the lake-half water, half-factory spew,” a badly polluted Lake Michigan only a few decades after the sparkling waters of the 1893 Chicago Exhibition and the ultra-clean “White City” (*Redwood and Wildfire* 391, Sotiropoulos 12-41). Each individual is susceptible to harming the common pot; for instance, “George came out to hunt the snowy egrets and purple swamp hens. A company in England was paying thirty-two dollars an ounce and didn’t care ‘bout the color of the man doing the selling. Long as they got purple jewel feathers and snowy white plumes for high-fashion hats. All over Europe, fancy rich ladies were styling Georgia birds” (33). Consciously Redwood treads lightly on earth, with George, she reminds him its bad for his insides “to go killing what you don’t need” (34) and with

a new lighting of first fruits on her birthday celebrated with Aidan at the shore of Lake Michigan, “she silently promised the lake to do no harm and asked the *crossroads* spirits to open the way” (382-383).

*Redwood and Wildfire* follows this conjuring tradition of environmental responsibility, or better worded, “mutual reciprocity” by bestowing Indigenous Scientific Literacies, a forward thinking way of characterizing Indigenous knowledge in opposition to Euro-Western characterizations of “native superstition” and magic, with the traditional figure of the conjure woman. Hairston incorporates several key characteristics of Indigenous Scientific Literacies. For example, she emphasizes a place-located knowledge of medicines, roots, and other elements of the landscape, showing an awareness of the utility of ALL the parts of the plants used carefully at all times. In their film, the Seminole dish of sofkee made with corn hominy interspersed with meat, cultivated Seminole farming, eating smoked fish in canoes and hunting skillfully with just one arrow used to catch a bear dances into the scenes (395). A spider bite and extensive blood poisoning is almost immediately quelled as a life-threat by Redwood’s dash into the woods to grab a necessary slimy root while an herbal tea produced in just the right amount allows Clarissa to avoid a life-threatening pregnancy (142, 236). Controlled burnings and fires even started with ceremonial torches of grabbed lightning, a significant Indigenous science for tens of thousands of years, appear along with natural forest fires, the dangerous Boneyard fire haints of ashes of the Chicago fire wiping out the Exhibition and later, Phipps Dry Cleaning business, the latter first started by envious Irish roughs and the exquisite balance of Miz Garnett Phipps, a fire haint that tells Aidan to “do right,” that dances in on train tracks as Iris and Aidan join the city crowd, and a person-fire haint that exchanges stolen heart beats to save her children, George, Iris, and Redwood along with other lives (70-72, 409-421).

The careful distinctions of various Indigenous methods and embedded, mentored Africana knowledge are distilled. For instance, Aidan's "Indian medicine," as Redwood calls it, is knowing that greenbrier can be quite dangerous if not used properly: "roots be poison, if you take too much, but just enough clean you out real good" (51). In this same swamp, Aidan covers himself with bear grease to protect against chiggers, ticks, and mosquitoes; in the meantime, Redwood employs a different technique with Miz Subie's cure-all bag of roots around her neck to ward off "no-see'ems and stinging demons" (47, 53). Further, Redwood provokes a little, "Miz Subie say I could work out my own understanding" with these pesty insects and "then I wouldn't need funky bear grease or nasty herbs" (53). This recognition in my Anishinaabowin tongue is called *gikendaasowin*. *Gikendaasowin* suggests being attuned to our tribal knowledge, information, and the synthesis of our personal teachings and has been wonderfully covered, without releasing too much of our guarded *aadizookaanan*, by Wendy Makoons Genius in *Our Knowledge is Not Primitive: Decolonizing Botanical Anishinaabe Teachings* (2009).

In the meantime, Native activist scholars are publishing more explicit information of their own forms of *gikendaasowin* in an effort to help coordinate more techniques of environmental sustainability.<sup>6</sup> The novel also suggests this kind of transformation among communities along with a recognition of the significance of theater, entertainment, dance, and the arts: Clarissa's group of thoughtful Progressive African American female thinkers, project her own increased awareness, especially after she realizes the significance of Redwood's conjuring as actual scientific practices once gathered, known in the heart, and learned by iterative utilitarian practice accompanied by ceremonial vigor.

Respect for Indigenous Scientific traditions is consciously cast in opposition to colonialism, renewed forms of slavery from extensive debt peonage and weekly lynchings to the

more daily, minute acts of bans from strolls in city parks (*Redwood and Wildfire*, and reflective of contemporary readers' sensitivity and reflexivity. Tradition not only encompasses timelessness but also marks out Indigenous knowledge as ever-changing and dynamic, forms of Native science that include necessarily dance, music, ceremony, and all art forms, the kind of traditionalism which Gregory Cajete (Acoma Pueblo) and Leslie Marmon Silko (Laguna Pueblo) contend gets away from the stark polar discrimination between the scientific and Indigenous ways of thinking. Chris Teuton (Cherokee) qualifies this outlook by reminding readers that the sciences and literatures, the oral and graphical impulses are kept dynamic by the critical impulse of weighing experientially one with another. In this sense, *Redwood* displays a critical impulse when she suggests her conjuring skills may "overgoe" Aidan's acquired Scientific Literacies one day.

This novel, then, effectively re-centers the conversation and critical impulses within Africana, Indigenous, and mixed communities already familiar and learning eagerly more about these environmental sustainabilities and provides a sharp contrast with the general mainstream-promoted thinking of the time, a reckless haste to obtain more and more, an aspect unfortunately of the sciences heralded of the time. While Iris, *Redwood*'s younger sister, can out-quote even her teachers and peers on Darwin's evolutionary ideas in *The Origin of Species* (1859) holding sway, this novel also skillfully tackles in its undercurrents, the more radicalized and racially-contaminated thinking of well-meaning citizens of Peach Grove such as Doc Johnson, who charitably lends book upon book to both *Redwood* and Aidan (known as Crazy Coop to all) as a gesture of his civilized demeanor.

Iris's mastery of Darwin deserves some attention given the history of the idea of racial formation and its treatment in Hairston's novel. Darwin's *Descent of Man: and Selection in*

*Relation to Sex* (1871) gets properly unpacked by Patrick B. Sharp who believes that the initial Euro-American response (much more positive than the one to *Origins*) presented this later book of Darwin's as a compelling "adventure of the English evolving, clambering up from the apes, struggling to conquer savagery, multiplying and dispersing around the globe" (32). In fact, this updating of *Origin* re-establishes the polygenist perspectives, minus the separate species argument, since, as Darwin argued, we can all cross-fertilize, and thus must be all of one species (monogenist thinking). But, in a sense, Darwin creates regressive thought hyper-amplified and fortified in *Descent of Man* by reference to the industrial-age notion of progress and man as toolmaker: the distinction becomes "bodily structure and mental faculties," and he surmised that various races such as Africans and Islanders (including all Natives he had not yet met) were best termed "sub-species." The term "race" he allows to remain in use "from long habit" (Sharp 37).

Darwin's thinking was of great impact at the time. His narrative of human progress asserted that Europeans were superior tool users and the most evolved branch of the human species. Darwin's vision of racial progress provided a "worldview not only for future scientists but also for historians and fiction writers trying to account for the importance of race and technology in the modern world" (Sharp 32). Lois A. Cuddy and Claire M. Roche further this argument in *Evolution and Eugenics*, where they establish the boom and extensive migration in the U.S. during the late nineteenth century: in 1860, 16 cities had populations over 50,000, by 1910, more than 80 cities each had an excess of 50,000, partly with immigration more globally to the U.S. as eugenics rises in popularity. Evolution's requirement for reproduction of the best human species and obsession with pathology (after bouts of yellow fever, etc.) creates an even harsher climate for homosexuality, poverty, and working class members: all are met with a sense of revulsion and with the desire to implement legislation to restrict reproduction of the "unfit."

While also obsessing about science, authors writing as realists carefully aligned their thinking with the sciences of the day, and even the naturalists, modernists, or socialists were “seduced consciously or unconsciously by the evolutionary and eugenic ideologies that placed these eminent authors themselves as the highest level of human development” committed to the idea of “scientific objectivity.” Darwin in *Descent* argues specifically that Natives and Africans cannot think abstractly (18) and that they are “the lowest savages” connected directly with “the most highly organized ape.” He quotes the maxim of the Spaniard, “Never, never trust an Indian” in order to illustrate the savagery and ethical defects of the uncivilized Indian.

Given this historical context, the status of *Redwood and Wildfire* as a tale of nineteenth- and twentieth-century social revolution moves on two fronts. The novel is a revolutionary text as a conjured *LOVE STORY* that is not just about the legal banning of interracial marriage during this neo-slavery period, but also in reaction to Darwin’s stated “scientific” thinking that actual HUMAN qualities evolve over millions of years. Thus, the revolutionary idea of *Redwood and Wildfire* as a love story between an African American female and an Indigenous male also functions radically at an immersive scientific/philosophical level: All “human” qualities evolved over millions of years, according to Darwin—qualities like: compassion, loyalty, love of beauty, sense of community and so on... are “undermined by the animal natures that take over when poverty and hunger impel people to act” (29).

In *Redwood and Wildfire*, conjuring is science, a recognizable application of Indigenous Scientific Literacy, and in the Indigenous sense of *gikedaasowin*, all inclusive of the kineticism of our lives, the performance of our lives, and the revolutionary tactics of sharing via stage performance as Redwood, Aidan, and Saeed do when shifting from “cooning” to white audiences mixed in with many assortments of immigrants, or “redfacing” on Wild West shows, to “coming

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out” as themselves before a breathless audience. Creating Abstractions, conjuring with storm fists or flying the air wireless on stage, are not only true, not only science, but revolutionary and resistant to the Euro-American mind-set explicated by Darwin’s “scientific” thinking. Conjured science and conjured art as science fiction cause people to brighten “at entertainment gracing their path” (434). The transformations of a *bright-destiny* spell in *Redwood and Wildfire* are glimpsed in the delight of dusty travelers stepping off the train: For a delicious instant, the station crowd turned into swooping osprey, elegant buzzards, and playful otters. Hardly nobody really *believed* what was happening to them. And after Aidan and Redwood passed, folk just settled back down to coming and going. Yet every once in a while in the days to come, these good people would hop and soar and feel as if they could just get up and do anything. (434)

**Comment [U7]:** This should be block quoted, but the strange black lines appear when doing so!

## Notes

<sup>1</sup>See my collection of stories by Indigenous writers *Walking the Clouds: An Anthology of Indigenous Science Fiction* (2012).

<sup>2</sup>Daniel Heath Justice’s theorizing of Cherokee Nationhood—a Upper World of order and a Lower world of chaos—in *Our Fire Survives the Storm: A Cherokee Literary History* (2006) supports Hairston’s Native philosophy.

<sup>3</sup> See Ryan Jay Friedman’s *Hollywood’s African American Films: The Transition to Sound* (2011) for a further account of *Hearts of Dixie*.

<sup>4</sup> See Omi and Winant’s influential *Racial Formation in the United States: From the 1960s to the 1990s* (1994).

<sup>5</sup> See Charles Chesnutt’s stories “The Goophered Grapevine” and “Po’ Sandy” in his *The Conjure Woman and Other Conjure Tales* (1899).

<sup>6</sup> As a start, see M. Kat Anderson's *Tending the Wild: Native American Knowledge and the Management of California's Natural Resources* (2005), Gregory Cajete's *Native Science-Natural laws of Interdependence* (2000), Linda Hogan's *Dwellings: A Spiritual History of the Living World* (1995), Beth Rose Middleton's *Trust in the Land: New Directions in Tribal Conservation* (2011), Melissa K. Nelson's *Original Instructions: Indigenous Teachings for a Sustainable Future* (2008), and Leslie Marmon Silko's *The Turquoise Ledge: A Memoir* (2010).

#### **Works Cited**

Alfred, Taiaiake. *Peace, Power, Righteousness: An Indigenous*. Ontario: Oxford UP, 2009.

Print.

Anderson, M. Kat. *Tending the Wild: Native American Knowledge and the Management of California's Natural Resources*. Berkeley: U of California P, 2005. Print.

Brooks, Daphne A. *Bodies in Dissent: Spectacular Performances of Race and Freedom, 1850-1910*. Durham: Duke UP, 2006. Print.

Brooks, Lisa. *The Common Pot: The Recovery of Native Space in the Northeast*. Minneapolis: U of Minnesota P, 2008. Print.

Cajete, Gregory. *Native Science-Natural laws of Interdependence*. Santa Fe: Clear Light, 2000. Print.

Chesnutt, Charles W. *The Conjure Woman and Other Conjure Tales*. 1899. Durham: Duke UP, 1996. Print.

---. "The Goophered Grape Vine." 1887. *The Conjure Woman and Other Conjure Tales*. Durham: Duke UP, 1996. 31-43. Print.

---. "Po' Sandy." 1888. *The Conjure Woman and Other Conjure Tales*. Durham: Duke UP, 1996. 44-54. Print.

Conley, Robert J.

Crouch, Stanley and Playthell Benjamin. *Reconsidering The Souls of Black Folk*. Philadelphia: Running, 2002. Print.

Cuddy, Lois A. and Claire M. Roche, eds. *Evolution and Eugenics in American Literature and Culture, 1880-1940: Essays on ideological Conflict and Complicity*. Lewisburg: Bucknell UP, 2003. Print.

Darwin, Charles. *Descent of Man: and Selection in Relation to Sex*. 1871. New York: Penguin Classics, 2004. Print.

---. *The Origin of Species by Means of Natural Selection: or the Preservation of Favoured Races in the Struggle for Life*. 1859. New York: Penguin, 1986. Print.

Dillon, Grace L., ed. *Walking the Clouds: An Anthology of Indigenous Science Fiction*. Tucson: U of Arizona P, 2012. Print.

Friedman, Ryan J. *Hollywood's African American Films: The Transition to Sound*. New Brunswick: New Jersey: Rutgers UP, 2011. Print.

Genius, Wendy Makoons. *Our Knowledge is Not Primitive: Decolonizing Botanical Anishinaabe Teachings*. Syracuse: Syracuse UP, 2009. Print.

Hairston, Andrea. "Griots of the Galaxy." *So Long Been Dreaming: Postcolonial Science Fiction and Fantasy*. Eds. Nalo Hopkinson and Uppinder Mehan. Vancouver: Arsenal, 2004, 23-45. Print.

---. "I Wanna Be Great!: How to Rescue the Spirit in the Wasteland of Fame." *Upstaging Big Daddy: Directing Theater as if Gender and Race Matter*. Eds. Ellen Donkin and Susan Clement. Ann Arbor: U of Michigan P, 1993. 235-252. Print.

---. *Mindscape*. Seattle: Aqueduct, 2006. Print.

- . *Redwood and Wildfire*. Seattle: Aqueduct, 2011. Print.
- Hearts in Dixie*. Dir. Paul Sloane. Fox, 1929.
- Hogan, Linda. *Dwellings: A Spiritual History of the Living World*. New York: Norton, 1995. Print.
- Hopkins, Pauline E. *Of One Blood: Or, The Hidden Self*. 1903. New York: Washington Square, 2004. Print.
- Hopkinson, Nalo. *Midnight Robber*. New York: Warner/Aspect, 2000. Print.
- Justice, Daniel H. *Our Fire Survives the Storm: A Cherokee Literary History*. Minneapolis: U of Minnesota P, 2006. Print.
- Krupat, Arnold. *All That Remains: Varieties of Indigenous Expression*. Lincoln: U of Nebraska P, 2009. Print.
- Lansdale, Joe R. "The Steam Man of the Prairie and the Dark Rider Get Down: A Dime Novel." 2000. *The Long Ones*. Sanford, FL: Necro, 2000. Print.
- Middleton, Beth Rose. *Trust in the Land: New Directions in Tribal Conservation*. Tucson: U of Arizona P, 2011. Print.
- Miéville, China. *The Scar*. New York: Macmillan, 2002. Print.
- . *Embassytown*. New York: Macmillan, 2011. Print.
- Mooney, James. *Myths of the Cherokee*.
- Nelson, Melissa K., ed. *Original Instructions: Indigenous Teachings for a Sustainable Future*. Rochester, VT: Bear and Company, 2008. Print.
- Okorafor, Nnedi. *Who Fears Death?* New York: Daw, 2010. Print.
- . "WisCon 34 Guest of Honor Speech." *The WisCon Chronicles: Writing and Racial Identity*. Vol. 5. Ed. Nisi Shawl. Seattle: Aqueduct, 2011. 196-201. Print.

- Omi, Michael and Howard Winant. *Racial Formation in the United States: From the 1960s to the 1990s*. 2<sup>nd</sup> ed. New York: Routledge, 1994. Print.
- Outka, Paul. *Race and Nature from Transcendentalism to the Harlem Renaissance*. New York: Palgrave Macmillan, 2008. Print.
- Rozelle, Lee. *Ecosublime: Environmental Awe and Terror from New World to Oddworld*. Tuscaloosa: U of Alabama P, 2006. Print.
- Sharp, Patrick B. *Savage Perils: Racial Frontiers and Nuclear Apocalypse in American Culture*. Norman: Oklahoma UP, 2007. Print.
- Silko, Leslie Marmon. *The Turquoise Ledge: A Memoir*. New York: Viking, 2010. Print.
- Sotiropoulos, Karen. *Staging Race: Black Performers in Turn of the Century America*. Cambridge: Harvard UP, 2006. Print.
- Teuton, Christopher B. *Deep Waters: The Textual Continuum in American Indian Literature*. Lincoln, Nebraska: U of Nebraska P, 2010. Print.
- Warrior, Robert. "Native Critics in the World: Edward Said and Nationalism." *American Indian Literary Nationalism*. Eds. Jace Weaver, Robert Warrior, and Craig Womack. Albuquerque: U of New Mexico P, 2005. 179-224. Print.
- West, Cornel with David Ritz. *Brother West: Living and Loving Out Loud: A Memoir*. Carlsbad: Smiley, 2009. Print.
- Womack, Craig. *Art as Performance, Story as Reflection in Native Literary Aesthetics*. Norman, Oklahoma: U of Oklahoma P, 2009. Print.

Andrea Hairston (born 1952) is an African-American science fiction and fantasy playwright and novelist.[1] Her novel *Redwood and Wildfire* won the James Tiptree, Jr. Award for 2011.[2] *Mindscape*, Hairston's first novel, won the Carl Brandon Parallax Award and was short-listed for the Philip K. Dick Award and the James Tiptree, Jr. Award.[3] Hairston was one of the Guests of Honor at the science fiction convention Wiscon in May 2012. She is the Artistic Director of Chrysalis Theatre and has created original productions with music, dance, and masks for more than a decade. Hairston is also th