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The Leaky Grid: Black and Native Electrified Imaginaries

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Philosophy in English

By

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I believe that Native stories and scholarship, Native narrative sovereignty, and Indigenous Futurity resist colonialism and honor the legacy of this land as a traditional Chumash site of learning, exchange, and knowledge creation. As such, I humbly acknowledge the Chumash Peoples, their Elders, past and present, as well as their future generations, their poetry, living songs, and winter harvest. This land acknowledgement breathes into life

¹ To read the UCSB English Department land acknowledgement in full, please visit:

To read the UCSB English Department land acknowledgement in full, please visit: https://english.ucsb.edu/sites/default/files/docs/land_acknowledgement.pdf.

responsibilities, relationships, and accountabilities that shape the content of the following pages.

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ABSTRACT

The Leaky Grid: Black and Native Electrified Imaginaries

By

Sage Gerson

The Leaky Grid: Black and Native Electrified Imaginaries investigates the cultural, ecological, and political entanglements of US electricity infrastructure, analyzing the co-constitutive relationship between electrical power and structural power. The Leaky Grid examines how the power grid and the narrative imaginaries of Western colonial modernity that it sparks produces racialized and colonial violence through different forms of environmental white supremacy. The Leaky Grid prioritizes Black and Native North American cultural production to imagine different modes and scales of electrified energy justice.

Working in concert with the electrified Black and Indigenous multi-media cultural production it centers, *The Leaky Grid* works against the grid's colonialist mythology of linear control and containment, instead focusing on aspects of electricity infrastructure that display its inherent porosity: electricity siphoning, leaking sparks, and submersion in the floodwaters caused by hydroelectric damming. Each instance of leakiness is to be learned from, providing a different opportunity to unpack the complicated web of power relations that electrification is at the center of and contributes to. *The Leaky Grid* illuminates how the infrastructural systems,

narratives, and imaginaries of Western modernity are porous, and lingers with the possibilities this porosity creates.

The Black and Native electrified imaginaries foregrounded throughout the project not only diagnose and lay bare colonialism's milieu of ongoing cultural, political, and environmental violence, but these approaches are also about worldbuilding: they open up other formations of power, identity, resistance, and environment. Ultimately, *The Leaky Grid's* primary goal is to perform an anticolonial, antiextractivist, and antiracist reading of the electricity grid. Methodologically, *The Leaky Grid* reads back and forth between print, audio and visual media, and material infrastructures, stitching together cultural and infrastructural analyses that examine the entanglement of materiality and representation. Foregrounding the power of imagination, *The Leaky Grid* utilizes an approach to literature that weaves together a genealogy of liberation, narrative, and imagination born from both the Black Radical Tradition and Native North American approaches to the embodied and material power of storytelling.

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INTRODUCTION: THE LEAKY GRID

"Electricity became a supple symbol of American modernity."

– Jennifer Lieberman, *Power Lines* (2017)

"I write back to a porous and forever transforming practice that is an ethical project concerned

with encounter."

- Tiffany King, The Black Shoals (2019)

As climate change intensifies, the global imperative to minimize carbon emissions and move

beyond oil deepens. Many visions for the future of energy imagine increased electrification as

a solution to the transition away from fossil fuels that does not require major cultural change.

An April 13, 2022 joint letter from a group of 178 business leaders, environmental and health

non-profits, government municipalities, and consumer protection, civil rights, environmental

justice, and affordable housing advocates sent to United States President Joseph Biden urging

him to "support economy-wide electrification as a critical decarbonization tool" is an example

of this vision. In the letter, increased electrification is presented as "necessary to ensure a safe

and thriving climate future" while also offering a variety of economic benefits, including "cost

savings for American families," "good-paying American jobs," and "avoided greenhouse gas

¹ Rewiring America. Letter. 2022. April 13, 2022.

 $\underline{https://assets.ctfassets.net/v4qx5q5o44nj/1N44vFK1qLjZEI8c2AFB3V/39919e049dd3f82c7}$

a3f608162418964/Climate Provisions Sign on Letter.04.13.22.pdf.

1

pollution." In this charged imaginary, electricity acts as a bridge between the fossil-fueled twentieth century and technologically driven green energy futures.

Yet, as the Petrocultures Research Group explains, attempting an energy transition that does not seek to transform the social practices and relations surrounding energy systems, and instead merely swaps one energy source for another, retains "existing socio-economic inequalities—indeed, requires them." In other words, climate change, a result of colonialism, extractive capitalism, and environmental injustice, is not solely an emissions issue. The Center for Interdisciplinary Environmental Justice (CIEJ) explains that "it is dangerous to reduce climate change to an 'emissions' issue and to leave intact the extractive and oppressive processes that caused climate change in the first place." CIEJ identifies these processes as the "co-constitutive systems of oppression: white supremacy, settler-colonialism, heteropatriarchy, capitalism, the nation-state, and land and water dispossession."

Not only does a greenwashed electrified future fail to dismantle the unjust cultural and imperial power relations that surround energy systems, but it also ignores the already disastrous impacts climate change has had on the power grid. Globally, and across the US,

² Petrocultures Research Group. *After Oil*. (Alberta: Petrocultures Research Group, 2016), 33.

³ Potawatomi scholar Kyle Powys Whyte demonstrates how climate change is intensified colonialism in "Indigenous Climate Change Studies: Indigenizing Futures, Decolonizing the Anthropocene."

Whyte, Kyle Powys. 2017. "Indigenous Climate Change Studies: Indigenizing Futures, Decolonizing the Anthropocene," *English Language Notes*, 55 (1-2): 153-162.

⁴ Center for Interdisciplinary Environmental Justice (CIEJ). "No Comemos Baterías: Solidarity Science Against False Climate Change Solutions," *Science for the People*. https://magazine.scienceforthepeople.org/. 2019.

⁵ CIEJ, "No Comemos Baterías: Solidarity Science Against False Climate Change Solutions."

electric utilities and regulators have failed to prepare the power grid for the impacts of climate change, including increased storms and intense heat and drought. Consider, for instance, Hurricane Maria, which took Puerto Rico's power grid offline in 2017; the triplicate winter storms that caused Texas's major power crisis in February 2021; and the Pacific West's electricity equipment—sparked fires which I analyze more closely in chapter two, "Reimagining California's Relationship to Fire." As Akhil Gupta attests, we "have to reimagine electricity use in the future that does not simply seek to extend the patterns of the present. Bringing more people to the grid so that they can consume more electricity is neither feasible nor desirable."

The joint letter urging "economy-wide electrification" conveys the ways in which electricity is contemporarily viewed as an environmentally friendly, technologically progressive solution to climate change that does not require radical (and necessary) cultural, political, environmental, and economic change. As Gupta attests, "The problem of sustainable futures requires a complete recalibration of energy use with social and political life." The electric car is one illustrative example of the shortcomings of building energy futures around increased electrification as a solution to fossil fuels. Electric cars are shaped by developmental logics which imagine that social progress results from technological innovation. In practice, electric cars perpetuate petrocultural imaginaries of limitless individual access to transportation and energy for the global elite. They do not provide the radical cultural shift necessary to address the underlying hierarchies of power and social practices that created

⁶ Gupta, Akhil. "An Anthropology of Electricity from the Global South," *Cultural Anthropology* 30.4 (2015): 564.

⁷ Gupta, "An Anthropology of Electricity From The Global South," 564.

climate change. Even in states like California, with high renewable generation, switching to electric vehicles will reduce carbon emissions by only approximately five percent. Instead, electric car battery production continues colonial systems of resource extraction and Indigenous displacement. Emma Jayne, of the CIEJ, explains, "In a future where we've replaced gasoline-powered vehicles with electric ones and power plants with giant batteries, we have FAILED to combat climate change, and our efforts have displaced thousands of Indigenous people from their homelands" (emphasis in original). Examining the environmental entanglements of, and the cultural imaginaries that shape, electrification is necessary for imagining and enacting more just and transformative energy futures that do not use electrification as a means of prolonging current extractive, colonial, and capitalist cultural approaches to energy.

The Leaky Grid: Black and Native Electrified Imaginaries engages the cultural, ecological, and political entanglements of US electricity infrastructure to analyze the co-

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⁸ Center for Interdisciplinary Environmental Justice (CIEJ). *The Secret Life of an Electric Car*. Accessed August 1, 2021. http://www.the-ciej.org/secret-life-of-an-electric-car.html.

⁹ Jayne, Emma. "Electrification Will Not Stop Climate Change, It Will Displace Thousands of Indigenous People," *Medium.* April 22, 2021. https://ejharri1.medium.com/electrification-will-not-stop-climate-change-it-will-displace-thousands-of-indigenous-people-45dd7fa8dbcf.

¹⁰ Karen Barad defines entanglement as "not simply to be intertwined with another, as in the joining of separate entities, but to lack an independent, self-contained existence."

Barad, Karen. Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning (Durham: Duke University Press, 2007), ix.

Nicole Starosielski's essay "Pipeline Entanglements of Fibre-Optic Cables" provides an illustrative example of infrastructural entanglement.

examines the way the power grid, and the narrative imaginaries of Western colonial modernity that the grid sparks, produce racialized violence through different forms of environmental white supremacy. *The Leaky Grid* prioritizes Black and Native North American cultural production to imagine different modes and scales of electrified energy justice.

Working in concert with the electrified Black and Indigenous multi-media cultural production it centers, *The Leaky Grid* works against the grid's colonialist mythology of linear control and containment, instead focusing on aspects of electricity infrastructure that display its inherent porosity: electricity siphoning, leaking sparks, and submersion in the floodwaters caused by hydroelectric damming. Each instance of leakiness is to be learned from, providing a different opportunity to unpack the complicated web of power relations that electrification is at the center of and contributes to. *The Leaky Grid* illuminates how the infrastructural systems, narratives, and imaginaries of Western modernity are porous, and lingers with the possibilities this porosity creates.

Feminist scholars including Wendy Hui Kyong Chun and Sarah Friedland, and Cecilia Chen, Janine MacLeod, and Astrida Neimanis, assert that porosity is a fundamental condition. As an inherent condition, it can cause problems (such as the electricity equipment-sparked fires in the Pacific West) and provide potential (such as when the porous power grid is taken advantage of both narratively and materially by electricity thieves). Engaging with the power grid as porous reorients conversations about electricity as inherently progressive, opening up the possibility of engagement with the grid at different scales, and in different-than intended ways. Beginning with porosity as an inherent condition and using instances of leakiness as

analytical and interpretive starting points make it possible to exceed the colonial gaze and the extractive view¹¹ in order to perceive "life otherwise"¹²

The Leaky Grid's primary goal is to perform an anticolonial, antiextractivist, and antiracist reading of the US electricity grid. Ultimately, it contends that such a reading of the power grid is necessary to imagining and enacting more just and transformative environmental futures, where being in relation with lands, waters, and energy outside of colonial extraction and Western developmental frameworks is possible.

POWER AND PROGRESS

As Rewiring America's letter evidences, representations of electricity are wrapped up in notions of progress, modernity, and the future. The cultural connection between electricity and progress may be taken for granted in the twenty-first century. However, as Jennifer Lieberman details, this connection is the result of a cultural (and literary) process through which electrification became wrapped up in notions of progress, and ultimately, in the nineteenth and early twentieth centuries, became "a common metonym for modernity." Some of these processes include targeted advertising designed to convince Americans that they needed to electrify their homes and businesses (some of which I explore at greater length in the first chapter, "Siphoning and Sabotage"). David Nye's history of electrification in the US also

¹¹ Gómez-Barris, Macarena. *The Extractive Zone: Social Ecologies and Decolonial Perspectives* (Durham: Duke University Press, 2018), 5.

¹² Gómez-Barris, *The Extractive Zone*, 11.

¹³ Lieberman, Jennifer. *Power Lines: Electricity in American Life and Letters*, 1882-1952 (Cambridge: MIT Press, 2017), 5.

details how electricity "helped to define modernity, progress, and physical and social well-being." ¹⁴ Imagining an electrified twenty-first century as inherently progressive and as essential to extending modernity into the future relies on these historical notions of electrification as a force of progress. Building on Lieberman's historical project, which focuses on electricity in US literature from 1882-1952, *The Leaky Grid* is interested in the afterlives of these historical and cultural processes, and examines electricity through a different, specific archive of Black and Native American literature and cultural production. While colonial and White supremacist narratives construct Black and Native people as outside of or auxiliary to Western modernity, *The Leaky Grid* prioritizes electrified Black and Native cultural production in order to ensure that they are no longer relegated to the outskirts of modernity, but instead seen as participating in modernity, and central to imagining energy, environments, modernity, and the future otherwise.

As *The Leaky Grid* finds repeatedly throughout the Black and Native cultural production that it thinks alongside, the metonymic connection between linear technological progress and electricity is more complex, uneven, and extractive than a simple narrative of electrified progress contends. Other literary scholars have noted in their own readings of the role of electricity in literature that electricity signifies in multiple, sometimes contradictory ways. Electricity, used to signal liberty and to metaphorize power, ¹⁵ has been simultaneously

¹⁴ Nye, David. *Electrifying America: Social Meanings of a New Technology, 1880-1940* (Cambridge: MIT Press, 1992), 141.

¹⁵ Smith, Caleb. "Bodies Electric: Gender, Technology, and the Limits of the Human, circa 1900." *Mosaic: An Interdisciplinary Critical Journal* 41. 2 (2008): 114.

a source of oppression and progress,¹⁶ and draws attention to cultural binaries that divide utility and the aesthetic.¹⁷ Caleb Smith writes that electricity has shaped the imaginary, lexicon, and aesthetic representation of power. He observes that many writers of the nineteenth and twentieth centuries use electricity as a metonym for power:

from Melville's Ahab, who overmasters his three mates aboard the Pequod by 'shock[ing] into them the [...] fiery emotion accumulated within the Leyden jar of his own magnetic life'; to Ellison's Invisible Man, who begins his awakening into racial consciousness when he is forced by white men onto an electrified rug that throws his body into grotesque, humiliating convulsions; to Foucault, who famously conceived power in terms of decentered networks, resistances, and flows.¹⁸

The Leaky Grid dwells in this rhetorical substitution, working to unpack the relation between power and electricity that this metonym demonstrates. Centering a layered, multifaceted, and ambivalent understanding of power that is at once horizontal/networked and vertical/hierarchical, material, cultural, and porous, The Leaky Grid showcases the ways in which electricity infrastructure materializes structural power and sociocultural power relations. As electricity's metonymic relationship to both progress and power demonstrates, progress and power are linked.

My thinking about power in relation to horizontality – especially in the form of the network, which seems particularly important given the networked topographical sprawl of the

¹⁶ Lieberman, *Power Lines*, 15.

¹⁷ Rubenstein, Michael. *Public Works: Infrastructure, Irish Modernism, and the Postcolonial* (Notre Dame: University of Notre Dame Press. 2010), 21 and 29.

¹⁸ Smith, "Bodies Electric," 114.

power grid – is informed by Alexander Galloway and Eugene Thacker, who assert that "the power relationship between sovereignty and networks" is "one of the central debates of our time." The network, they write, "has emerged as a dominant form describing the nature of control today, as well as resistance to it." Networks and horizontal power, Galloway and Thacker observe "by their mere existence, are not liberating; they exercise novel forms of control that operate at a level that is anonymous and nonhuman, which is to say material." It is foolish," they caution, "to fall back on the tired mantra of modern political movements, that distributed networks are liberating and centralized networks are oppressive … decentralization, or the rhizomatic swarm ideology is value free, useful for military, marketing, terrorism, activism and new forms of coercion. It is not equal to freedom."

¹⁹ Galloway, Alexander and Eugene Thacker, *The Exploit: A Theory of Networks* (Minneapolis: University of Minnesota Press, 2007), 1.

²⁰ Galloway and Thacker, *The Exploit*, 4.

²¹ Galloway and Thacker, *The Exploit*, 5.

²² Galloway and Thacker, *The Exploit*, 13.



Figure 1. *Electrify! for peace, planet, and prosperity. Rewiring America.* 2022.

The above image (Figure 1), was shared on Twitter by Rewiring America, "the leading electrification nonprofit," alongside their joint letter. The image clearly evokes the Statue of Liberty – an iconic visual metonym for the US colonial nation state. However, instead of Lady Liberty's right arm raising a torch toward the sky to light the way for the "huddled masses" as they migrate to the shores of the so-called "New World," Rewiring America's lady liberty holds an electrical plug. Drawing on (colonial) textbook narratives of the US as a melting pot,

²³ Rewiring America.

Rewiring America's image redefines the US as a country powered not by immigrants but by electricity. Notably, Rewiring America's electric lady liberty is reimagined as a woman of color, erasing the colonial, xenophobic, and White supremacist histories and ongoing power structures that the US is built upon and continues to rely on, interpolating BIPOC people into a future of "peace, planet, and prosperity" – a future that the image makes clear is reliant on the continuation of the US colonial nation state and increased electrification. This image introduces some key concerns of *The Leaky Grid*, including, how electricity acts as a metonym for power, progress, and the nation state; the relationship between colonialism, colonial power, and electricity; and, the intersections of race, Indigeneity, and electrification.

In selecting the power grid as its object of study, *The Leaky Grid* takes up Donna Haraway's point that it matters "which systems systematize systems"²⁴ and thus begins with the observation that the power grid is a structuring structure of Western developmental modernity. One of this project's rationales for studying the power grid is to practice a form of humanities "studying up," Laura Nader's ethnographic term for studying the "colonizers rather than the colonized, the culture of affluence rather than the culture of poverty."²⁵ In my focus on the power grid, I draw inspiration from Native feminist scholars – including Kim Tallbear, Sisseton Wahpeton Oyate scholar of racial politics in science, and Micmac and Mohawk scholar of Indigenous environmental justice Elizabeth Hoover – both of whom adopt Nader's

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²⁴ Haraway, Donna. *Staying with the Trouble: Making Kin in the Cthulucene* (Durham: Duke University Press, 2016), 101.

²⁵ Nader, Laura. "Up the Anthropologist: Perspectives Gained from Studying Up" in *Reinventing Anthropology* (New York: Vintage Books, 1972), 289.

method of turning the "lens on those in society who are not often seen as a cultural group because of their institutionalized positions of power."²⁶

I approach my research and writing as an opportunity to foreground the importance of recognizing and grappling with power and positionality. As such, it is important for me to position myself in relation to the stories I read and think alongside. As a White, cis-gender, settler scholar, I understand my research to be shaped by uneven power dynamics – as is all knowledge produced with the White supremacist and colonial US university system. I acknowledge my positionality as a White settler scholar to encourage critical thinking about the power structures of knowledge production, the university, and my role in them; to enable relationships based on accountability and reciprocity; and with the hope of producing research as an ally/accomplice.²⁷ Throughout the project, I strive to work against colonial and masculinist academic systems of mastery that encourage scholars to frame themselves as "experts," and instead, emphasize that my role is that of reader, facilitator, and learner. Julietta Singh's *Unthinking Mastery* guides my desire to "unthink" the scholarly project of mastery over subjects, stories, others, and the self, and to instead, aim for "other modes of relational being that may not bet be recognizable."²⁸

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²⁶ Hoover, Elizabeth. *The river is in us: Fighting Toxics in a Mohawk Community* (Minneapolis: University of Minnesota Press, 2017), 19.

²⁷ In their essay "Accomplices not Allies, Abolishing the Ally Industrial Complex: An Indigenous Perspective," *Indigenous Action Media* lays out a provocation intended to intervene "in some of the current tensions around solidarity/support work." Their solution is to turn to the roll of an accomplice – which they define as "a person who helps another commit a crime" – as a model for radically working together toward anticolonial ends.

²⁸ Singh, Julietta. *Unthinking Mastery: Dehumanism and Decolonial Entanglements* (Durham: Duke University Press, 2018), 1.

My role as reader (and learner) inherently shapes this project as I conceive of myself first and foremost not as a scholar or writer, but as a reader. For all of my remembered life, I have constructed my world through the stories I encounter. My relationship with the material world, and my analysis of energy systems and the infrastructure that supports them, is inherently shaped and mediated by story (and is no less real for this mediation). As Native American authors assert – from Pueblo poet and author Leslie Marmon Silko to Thomas King, of Cherokee ancestry, to Ohlone-Costanoan Esselen poet Deborah A. Miranda – "stories are 'all we have'"²⁹ and "the truth about stories is that's all we are."³⁰ The liberatory power of the imagination has a rich genealogy of thought within the Black Radical Tradition as well, including Robin Kelley's Freedom Dreams, in which he explains that "the most radical art is not protest art but works that take us to another place, envision a different way of seeing, perhaps a different way of feeling."31 Walidah Imarisha and adrienne maree brown's concept of visionary fiction, which they define as fiction with relevance for building freer worlds, 32 also foregrounds the embodied and material power of storytelling. All stories do work in the world and on their listeners/readers/tellers.

²⁹ Silko qtd. in Miranda, Deborah. *Bad Indians: A Tribal Memoir* (Berkeley: Heyday Press, 2012), xi.

³⁰ King, Thomas. *The Truth About Stories: A Native Narrative* (Minneapolis: University of Minnesota Press, 2003), 2.

³¹ Kelley, Robin. *Freedom Dreams: The Black Radical Imagination*. Boston: Beacon Press, 2002: 11.

³² Imarisha, Walidah and adrienne maree brown, *Octavia's Brood: Science Fiction Stories from Social Justice Movements*. Oakland: AK Press, 2015.

This is a project about the work the stories I read do. I am in relation with the stories I write about. My understanding of the role of the texts I write with and alongside is that they are co-producers of this project. ³³ Writing is always a fraught act, especially in English – a noun-based objectifying and masculinist language that brings with it a history of oppression and conquest. Trinh T. Minh-ha criticizes the continued "myth of the original author" and the way Western "literature remains completely dominated by the sovereignty of the author." ³⁴ Learning from Minh-ha, I strive to exist, instead, "simultaneously *with*" my writing. ³⁵ Minh-ha writes that "My human language-net excludes totalization, and my gesture is a continuation striving for continuation." ³⁶ I conceive of this project as a gesture of continuation in service of the stories that make up and have changed my world – as a way of being in relationship with and continuing them.

As Rewiring America's electric lady liberty illustrates, experiences of and interactions with energy and infrastructure are mediated by stories, imaginaries, and cultural

³³ I borrow "coproduction" from documentary film practices. Jay Ruby's "Speaking For, Speaking About, Speaking With, or Speaking Alongside" informs my understanding of coproduction.

Ruby, Jay. "Speaking For, Speaking About, Speaking With, or Speaking Alongside – An Anthropological and Documentary Dilemma," *Visual Anthropology Review.* 7.2 (1991): 50-67.

Though I am not an ethnographer, I work to employ an interpretive type of feminist standpoint methodology learned from feminist scholars such as Sandra Harding, to shape my analysis from the stories told by/for/about those who have been historically marginalized.

Harding, Sandra. "Rethinking Standpoint Epistemology: What is 'Strong Objectivity?.' *The Centennial Review.* 36.3 (1992): 437-470.

³⁴ Minh-ha, Trinh T. Woman, Native, Other (Bloomington: Indiana University Press, 1989), 29.

³⁵ Minh-ha, Woman, Native, Other, 29.

³⁶ Minh-ha, Woman, Native, Other, 50.

representations. My approach to close reading infrastructure works across media and material forms and is interpretive and analytical. Methodologically, The Leaky Grid goes beyond a traditional literary studies approach to textual interpretation and reads back and forth between cultural media and material infrastructures to examine the entanglement of materiality and representation.³⁷ Janet Walker and Nicole Starosielski outline the importance of "reconnecting theoretically informed representational analysis ... to matters of science and technology, labor and power, and contaminated environments" in order to resist reinforcing the "textinfrastructure binary."38 Michael Rubenstein offers the succinct theoretical term electrifiction (which transforms electrification by deleting the "a") "as a very compact way of describing, from a culturalist point of view, the multiple and competing discourses that circulated around the technological enterprise of electrification."³⁹ Though writing about the creation of Ireland's national electricity grid and the ways electricity and other "public works" are represented in Irish literature, Rubenstein's "electrifiction" is useful to my reading of electricity within a US cultural context as it solders together electricity and the study of narrative, taking seriously a literary studies approach to utilities where "fiction means much more than simply a story that

³⁷ I take an understanding of electricity infrastructure as both a discursive construction and material form from Lisa Parks and Nicole Starosielski work on media infrastructures.

Parks, Lisa and Nicole Starosielski eds., *Signal traffic: Critical studies of media infrastructures* (University of Illinois Press, 2015), 5.

³⁸ Walker, Janet and Nicole Starosielski, "Introduction: Sustainable Media." *Sustainable Media: Critical Approaches to Media and Environment* (New York City: Routledge, 2016), 4.

³⁹ Rubenstein theoretically retools the term "electrifiction," tracing its history back to Lenin and the Communist Party: "Lenin coined his now-famous definition of communism as 'Soviet power plus electrification' ... Lenin's detractors, however, 'are said to have ridiculed the program, suggesting that the 'a' be deleted from electrification.' My own definition of *electrifiction*, though the term is borrowed from GOELRO's antagonists, is far less insulting than it was originally intended to be" (Rubenstein, *Public Works*, 132).

is not true." ⁴⁰ To account for the representative, imaginative, and material, I adapt a close reading approach commonly used in literary studies to scrutinize specific infrastructural segments, details, interrelations, and attributes in order to produce meaning about the system—much the same way literary scholars who practice text-based close reading focus on specific details in order to produce knowledge about a text.



Figure 2. An electricity tower in PG&E's service territory, just outside San Luis Obispo, California. The photo shows the impossibility of visualizing electrical infrastructure within a single frame. The tower looms, too large to fit in the photograph, and the transmission lines exceed capture by the photo's frame, alluding to the larger interconnected grid system the

⁴⁰ Rubenstein, *Public Works*, 132.

tower is part of. Photograph by Sage Gerson. The photograph is reproduced with permission of the photographer.

Reading for electricity infrastructure means addressing issues of scale. The sprawl, scope, and scale of the power grid complicates its local visibility—the entire system of the grid remaining out of view. As Lisa Parks has written, "an infrastructure is difficult to visualize in its entirety within a single frame." There is no vantage point from which an electricity user can see the entirety of the electrical grid as it stretches across the continent to deliver electricity. Too high of an aerial view renders the electricity infrastructure invisible, too earthbound and the system recedes, a specific local infrastructural segment filling one's vision. In other words, the power grid requires a methodology of limitation, one that resists a God's-eye view, forcing partial perspective.

Scholars often define infrastructures by their perceived invisibility, claiming that breakdown and failure are needed to produce infrastructural visibility.⁴² While infrastructure breakdown is often spectacular (oil blowouts, bursting dams, failing bridges), this formulation reinscribes reductive binaries between visible/invisible and success/failure. Even when

⁴¹ Parks, "Stuff You Can Kick": Toward a Theory of Media Infrastructures," *Between Humanities and the Digital* (Cambridge: The MIT Press, 2015): 356.

Graham, Stephen. "When Infrastructures Fail." *Disrupted Cities: When Infrastructure Fail.* New York: Routledge, 2010.

Star, Susan Leigh. "The Ethnography of Infrastructure." *American Behavioral Scientist* 43.3 (1999): 377-391.

⁴² Parks and Starosielski, *Signal Traffic*.

operating without failure, electricity infrastructure is not invisible to communities who live in close proximity to toxic coal-fired power plants, or to those who install solar panels on their homes and businesses. The formulation of visible and invisible is about a kind of attention—what is known about something, and who notices—that is inherently shaped by positionality, spatiality, and structures of power. To see or be seen is not necessarily the same as to know or be known.

Writing about partial perspective and situated knowledges, Donna Haraway theorizes that "seeing everything from nowhere," or the "god trick" of "infinite vision is an illusion." The god trick of objective vision, she cautions, has been mistaken "for creativity and knowledge, omniscience even." Haraway writes that "the knowing self is partial in all its guises, never finished, whole, simply there and original; it is always constructed and stitched together imperfectly, and therefore able to join with another." Haraway provides a framework for thinking through how knowledge is produced from specific situated perspectives, and how an approach that acknowledges limitation is not the same as reduction or foreclosure, instead this knowing creates the possibility for interconnections. In *The Leaky Grid*, I adopt such an approach to enable an account of the power grid that exceeds a dichotomous classification as invisible or visible, successful or actively failing.

⁴³ Haraway, Donna. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective," *Feminist Studies* 14.3 (1988): 581.

⁴⁴ Haraway, "Situated Knowledges, 587.

⁴⁵ Haraway, "Situated Knowledges," 587.

⁴⁶ Haraway, "Situated Knowledges," 586.

METONYMIC METHODOLGY

I propose that the rhetorical trope of metonymy provides a framework for analyzing the power grid and the cultures of modernity that electricity sparks. Throughout *The Leaky Grid*, metonymy operates rhetorically, visually, spatially, and materially. Beyond the ways that electricity has come to symbolize progress, electricity is often spoken about through metonym in the English language. Colloquial terms for electricity such as "power," "lights," and "current" are all metonyms that produce knowledge about electricity through substitution. Current is in a part/whole relationship to electricity; lights reference the energetic work that electricity accomplishes and therefore is in close association; and power is contiguous with electrical energy. For these reasons, Lieberman theorizes that metonymy plays an ongoing role "in our representations and conceptualizations of electrical systems." Electricity becomes sense-able and knowable through metonymy.

Being an energy consumer emphasizes knowledge and familiarity with certain aspects of electricity use — what Mette Kragh-Furbo and Gordon Walker describe as "the energetic work that it performs," such as "the intended movement of an electric fan ... electricity itself is not directly perceivable in its presence, movement or amount." Energy systems are designed to highlight individuals' everyday encounters with energy. This is facilitated, in part, by interfaces, such as light switches, fuse boxes, and electricity meters, designed to specifically mediate user interactions. Often, these interfaces position energy as commodity and user as consumer. These interfaces provide familiar touchpoints because, in practice, they make the

⁴⁷ Lieberman, *Power Lines*, 15.

⁴⁸ Kragh-Furbo, Mette and Gordon Walker. "Electricity as (Big) Data: Metering, spatiotemporal granularity and value," *Big Data & Society*. 5.1 (2018).

work electricity performs perceptible. Lieberman observes that "when the word electricity evokes the components that users see and control—the light you turned on, the power whirring through your devices—it functions as a metonym." While Lieberman analyzes the reductive role that metonymy plays in cultural constructions of electricity, as it can make invisible the human labor and complex sociotechnical systems that make electrification possible, I take up metonymy as a framework that draws attention to the grid's spatiality, historical context, and interconnections.

A rhetorical trope is a device that makes meaning at the conceptual level through substitution.⁵⁰ A familiar example is the metaphor, a device which produces new meaning through comparison, similarity, and equation.⁵¹ For example, in order to produce knowledge about the co-constitutive relationship between the State of California and one of its major electricity utilities, Pacific Gas & Electric (PG&E), the *San Francisco Chronicle* employs metaphor: "The fabled histories of California and Pacific Gas and Electric Co. have been so inextricably linked that the venerable power company is to the Golden State what General Motors is to Michigan."⁵² In this metaphor, comparison and similarity produce conceptual knowledge about California and investor owned utility (IOU) PG&E, centering on the ways the privatization of resources, capitalist industry, and corporate power are inherent to colonial

⁴⁹ Lieberman, *Power Lines*, 214.

⁵⁰ Sajé, Natasha. "Metonymy, the Neglected (But Necessary) Trope." *The American Poetry Review* 38.1 (2009): 47-50.

Matus, Jill. "Proxy and Proximity: Metonymic Signing." *University of Toronto Quarterly* 58.2 (1988): 305-325.

⁵¹ Matus, "Proxy and Proximity: Metonymic Signing," 307.

⁵² Doyle, "Utility Giant Grew from Gold Rush Roots."

projects of statehood. I examine this and other related examples at greater length as part of the public literature I analyze in chapter two. Metaphor, according to Roman Jakobson, relies on similarity and metaphor on contiguity. Metonymy also works through substitution but is the substitution of a part for the whole (or a whole for the part),⁵³ the substitution of a name,⁵⁴ or the substitution of something interrelated or closely associated.⁵⁵

A metonymic approach provides the thread for stitching together different critical encounters with the power grid — forging an analysis focused on infrastructural interrelationships, spatiality, contexts, and part-whole relationships. Natasha Sajé theorizes that "Metonymy shows us how we (are taught to) see the world through the things we connect and represent. Analyzing metonymy involves understanding part-whole relationships, contexts, and categories." Jill Matus observes that metonymy was reclaimed by feminist

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⁵³ Synecdoche is the specific rhetorical trope where a part is substituted for a whole, or a whole is substituted for a part. Following in the footsteps of many literary scholars, I have subsumed it under the umbrella of metonymy (Sajé, "Metonymy, the Neglected (But Necessary) Trope," 325; Matus, "Proxy and Proximity: Metonymic Signing," 47).

⁵⁴ Think here of the way corporate brand names come to stand in for the objects they produce, such as Xerox for copier and Kleenex for tissue. Unpacking the cultural ideologies inherent in these metonyms draws attention to corporate power and capitalist modes of production.

⁵⁵ Sajé, "Metonymy, the Neglected (But Necessary) Trope;" Matus, "Proxy and Proximity: Metonymic Signing."

For example, Bob Johnson opens his entry on "Embodiment" in *Fueling Culture 101* with a metonym. He proposes that hot yoga, in all of its luxurious excess, is an embodied and tactile metonym for modernity's carbon-fueled culture. For Johnson, hot yoga, made possible only by the burning of coal, petroleum, and petroleum products, substitutes for all of modernity's "pleasures of combusted carbon."

Johnson, Bob. "Embodiment." Fueling Culture: 101 Words for Energy and Environment. (New York City: Fordham University Press, 2017), 124.

⁵⁶ Sajé, "Metonymy, the Neglected (But Necessary) Trope," 48.

literary scholars⁵⁷ because it is "concerned with context," "bound up with temporality," "spatial, physical," and, powerfully, as "positionality made figurative." Matus's linking of metonymy and positionality connects a metonymic reading of infrastructure directly to Haraway's situated knowledges and partial perspectives.

By focusing on the contiguous, spatial, and physical, metonymy draws attention to the grid's interactions with environments, geographies, and landscapes. Matus asserts that "A sensitivity to metonymy in reading texts not only necessitates an attention to context, positionality, and interrelationships but also advances the decoding of cultural perspectives and ideologies, since the things we choose to connect and represent in terms of each other tell us about the way we see the world." Analyzing the power grid through the concept of metonymy brings attention to the colonial, economic, and political forces shaping its interrelationships with ecologies and human structures of power. Through a metonymic methodology of partial perspective, analyses of specific aspects of and encounters with electrical infrastructure produce knowledge about the power grid despite the fact that its scale exceeds a single frame.

LEAKINESS

The concept of leakiness animates this project. Recognizing its indebtedness to Native and Black feminist theorizing, storytelling, and poetics, *The Leaky Grid* uses leakiness as a heuristic to illuminate moments where the grid's colonial, extractive, and developmental

⁵⁷ Matus, "Proxy and Proximity: Metonymic Signing," 306.

⁵⁸ Matus, "Proxy and Proximity: Metonymic Signing," 311.

⁵⁹ Matus, "Proxy and Proximity: Metonymic Signing," 312.

⁶⁰ Matus, "Proxy and Proximity: Metonymic Signing," 323.

mythology of linear control and containment is destabilized: instances of electricity theft; the sparks leaking from California's power lines that start superfires in the Pacific West; submersion in the floodwaters caused by hydroelectric damming. Each instance of leakiness displays the grid's inherent porosity and provides the opportunity to both unpack the complicated web of power relations that electrification is at the center of, and to unsettle white, colonial, and masculinist cultural relationships to energy and the environment.

"Leakiness and seepage," Chen, MacLeod, and Neimanis assert, are "feminist concepts" that "have been mobilized to identify crucial porosities in bodies and theories alike. We already think with water," they observe, "both physiologically and in this use of watery language and metaphor. Just as water animates our bodies and economies, so it also permeates the ways we think." They observe that many "concepts and ideas would be unthinkable without a language of flow, circulation, and depth." My focus on the grid's built-in leakiness opens up the possibility of engagement with the grid in more-than/different-than intended ways and, metonymically, highlights the permeability of the narrative of Western modernity. *The Leaky Grid* reveals how electricity infrastructure is always already porous and dwells in the pluriversal of the possibilities of its leakiness.

⁶¹ Chen, Cecilia, Janine MacLeod, and Astrida Neimanis, *Thinking with Water* (Montreal: McGill-Queen's University Press, 2013), 10.

⁶² Chen, MacLeod, Neimanis, *Thinking with Water*, 10-11.

⁶³ Chen, MacLeod, Neimanis, *Thinking with Water*, 10.

⁶⁴ I use "pluriversal" in direct reference to Arturo Escobar's work, who defines the concept as "toward plural ways of making the world."

Escobar, Arturo. *Designs for the Pluriverse: Radical Interdependence, Autonomy, and the Making of Worlds* (Durham: Duke University Press, 2018), 7.

What is made possible when this watery language of leakiness is applied to the infrastructural system of the power grid? Describing the power grid as leaky may seem incongruous, but doing so makes different engagements with electrification possible that do not sit easily within cultural assumptions about progress, technology, development, and modernity. Employing leakiness as a heuristic through which to produce knowledge about the power grid allows The Leaky Grid to rethink electricity as an elemental phenomenon that exceeds the confines of the grid – as an element in elemental relation to other environmental forces such as water and fire. Like the work of Melody Jue and Rafico Ruiz, this project rethinks the boundaries of electricity infrastructures to "account for the life-shaping agencies of nonhumans,"65 "where the elements are not a neutral background, but lively forces that shape culture, politics, and communication."66 Inspired by the way Jue and Ruiz's collection on elemental media and politics takes up saturation as a "material heuristic that begins with water" but "quickly exceeds its aquatic valances, offering a sensitivity to co-presences, transformations, and processes," especially in "situations discrete objects/substances/phenomena may be difficult to delineate," I take up leakiness as a useful heuristic that begins with liquid, but moves beyond its direct relationship to bodies of water.

The Leaky Grid works to show that infrastructural circulation is dependent on resource control. Energy and resource circulation via infrastructure systems cannot exist without environmental conquest and control. Likewise, the ways energy resources circulate in global

⁶⁵ Jue, Melody and Rafico Ruiz, *Saturation: An Elemental Politics* (Durham: Duke University Press, 2021), 2.

⁶⁶ Jue and Ruiz, Saturation, 1.

markets is dependent upon who controls them, while energy resources are controlled through market circulations. This dialectical relationship, in my reading, is what accounts for the type of systemic porosity this project explores. There is no such thing as total control (of environments or people), and a model of circulation built on control and conquest will always leak. Infrastructures, in a similar manner as bodies, are "always vulnerable to rupture and renegotiation." Whether through electricity theft, flying sparks, or the grid's porous openness to distributed renewables, the grid has never been a closed system. Throughout this project, leakiness operates on multiple conceptual levels.

Chapter one, "Siphoning and Sabotage," emphasizes the vulnerability of the grid to circulatory redirection by electricity thieves, such as the protagonist in Ralph Ellison's canonical *Invisible Man*. Informed by feminist media studies scholars Chun and Friedland, I conceive of the relationship between enclosure and the threat of the leak as a dialectical one. They note that "the very logic of enclosure ... bears the destructive threat of the leak." Their thinking about the built-in leakiness of digital and information media helps me conceive of the grid not as a closed circuit, but as a porous one, vulnerable to new connections and redirections exploited by siphoners who intervene in and co-opt the circulatory aims of infrastructure⁶⁹ when they steal electric current.

⁶⁷ Neimanis, Astrida. *Bodies of Water: Posthuman Feminist Phenomenology* (New York: Bloomsbury, 2017), 2.

⁶⁸ Chun, Wendy Hui Kyong and Sarah Friedland, "Habits of Leaking: Of Sluts and Network Cards." *Differences* 26.2 (2015): 9.

⁶⁹ Larkin has famously defined infrastructures as comprising "the architecture for circulation." Larkin, Brian. "The Politics and Poetics of Infrastructure." *Annual Review of Anthropology* 42 (2013): 328.

Chapter two, "Reimagining California's Relationship to Fire," analyzes California's electricity equipment-sparked superfires as instances of energy infrastructure leakiness. I connect my reading of the sparks leaked from California's grid with the knowledge produced by Indigenous land and water protectors that it is incorrect to refer to "if" pipelines will leak, but instead "when." Doing so draws attention to the inherent leakiness (and violence) of energy infrastructure. While readers may be more familiar with oil pipeline leaks and ruptures, or the leakiness of toxic contamination, radiation, and exposures overtime, the power grid as an energy system is also made sense-able through the very real environmental violence that can (and does) result from infrastructural leakiness. Following the leaked sparks from California's power grid reveals how the grid contours environments, dictates labor practices and conditions, and fuels cultures. Chapter two's focus on California's increasing electricity-sparked superfires also elementally links fire and electricity.

In an interview as part of the first episode of the PBS SoCal multimedia series, *Tending the Wild*, focused on Indigenous cultural burning in California, Jared Dahl Aldern, the EPA Program Manager for the Cold Springs Rancheria of Mono Indians, compares fire to electricity:

Fire is really a lot like electricity. Electricity is a dangerous thing. You can get a severe shock from electricity and it can kill people. But it can also be put to wonderful uses. And fire, when used in a sophisticated manner, is very much the same way. Fire can course through the forest like electrons through a wire and energize those circuits that

the forest has. It can turn on the meadows and encourage them to bloom at the right time of the year.⁷⁰

In his interview, Aldern links fire and electricity through simile. By comparing fire to electricity, Aldern hopes to familiarize viewers with a phenomenon (fire) that he presumes viewers are wary of, given its played out potential for extreme destruction, with one that he hopes viewers are more comfortable with due to its (for many) quotidian everyday use. His extended comparison draws on an electrified lexicon, describing fire as "coursing through" the forest and "turning on" meadows and flowers. Aldern's formulation mirrors John Durham Peters' inclusion of electricity in his chapter "The Fire Sermon," where he writes that, "electricity is the everyday manifestation of vestal fire: a cool, clean, quick current coursing through infrastructures, rather than the raging messy snapping terror of uncontrolled fire ... Electricity is repressed fire." Both of these articulations connect fire and electricity conceptually – as two elemental sources of light and heat. "The fire-electricity link" as Peters calls it, is all too regularly sparked in California.

Yet, fire and electricity are not the same and reducing electricity to a form of "vestal fire" collapses their elemental differences. Fire is a process of consumption, its heat and light requiring fuel and oxidation. Electricity is more akin to a form of energy transfer – a traveling current. Flow and current are both watery and electrified words. By conceptually submerging

⁷⁰ KCET *Tending the Wild*. "Cultural Burning: Episode 1." 2016. https://www.kcet.org/shows/tending-the-wild/episodes/cultural-burning. 00:09:08.

⁷¹ Peters, John Durham, *The Marvelous Clouds: Toward a Philosophy of Elemental Media* (Chicago: University of Chicago Press, 2015), 123.

⁷² Peters, *The Marvelous Clouds*, 127.

electricity in water – which I do in the third chapter, titled "No one had asked the water what it wanted" – elemental links between the two become evident.

Chapter three, "No one had asked the water what it wanted," turns to sites of hydroelectricity generation in order to theorize the relationship between water and electricity. Early hydroelectric dams like that at Niagara Falls and along the Susquehanna River, where a 1926 dam created so much power that a network of wires were erected to sell the electricity further afield, became "the seed[s] of the electricity grid as we know it." Dams are one of the earliest examples of energy infrastructure, designed to extract energy as a resource from the living earth. The use of dams to harness the energy of water's movement have a long history that predates the generation of hydroelectricity and the power grid, dating back to at least the third century BC when the ancient Greeks used water mills to turn grindstones.⁷⁴ Dams are also central to settler colonist land and water relations on Turtle Island. Historical accounts report that when new groups of settlers arrived in America, the first two major structures they built were a church and a dam. 75 "The dams plugged streams and set them to work, turning gears to grind corn, saw lumber, and carve shingles."⁷⁶ Dams are also at the center of the long history of Indigenous land and water protection: "During King Phillip's War in 1676, the Wampanoag tribe attacked colonist's dams and millhouses, recognizing that without them,

⁷³ Martin Doyle, qtd in Lieb, Anna. "The Undamming of America." *Nova*. August 12, 2015. https://www.pbs.org/wgbh/nova/article/dam-removals/.

⁷⁴ Pain, Stephanie. "Power through the ages." *Nature*. November 29, 2017. https://www.nature.com/articles/d41586-017-07506-z.

⁷⁵ Lieb, Anna. "The Undamming of America." *Nova.* August 12, 2015. https://www.pbs.org/wgbh/nova/article/dam-removals/.

⁷⁶ Lieb, "The Undamming of America."

settlers could not eat or put roofs over their heads."⁷⁷ Chapter three turns to Linda Hogan's fictional depiction of land and water defense against the James Bay Hydroelectric Project in her novel *Solar Storms* to show the impossibility of truly controlling water's circulation, flow, and constant movement⁷⁸ – to show that lands and waters always exceed the Western colonial urge to turn them into extractable commodity resources.

LeAnne Betasomasake Simpson's short spoken word poem "leaks," from her larger multi-media collection *Islands of Decolonial Love*, engaged extensively in the third chapter, reveals a watery and porous world, full of leaks. Water is, in part, so alive and so theoretically, metaphorically, and methodologically rich because of its constant movement – rivers rushing toward the ocean, underground aquifers bubbling up, the rise of the tide, the transformation between liquid, solid, and gaseous states. It is this movement that links water to electricity, as both form currents that move and flow around the globe. Over and beyond a shared vocabulary of flow and current, water and electricity are linked energetically and elementally. Scientifically, liquidity creates the possibility of electric current. Earth has a magnetic field because of its molten core, comprised of nickel and iron. Molten substances are liquids that are formed by melting a substance that is solid at room temperature.

Simpson's poem also succinctly connects water and electricity in the figure of the hydroelectric dam. Leakiness's relationship to water demands an extended immersion into the ways that water and electricity are linked in sites of hydroelectricity generation. Humans yoke, control, and contain water's circulation to generate electricity. Hydroelectric dams produce

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⁷⁷ Lieb, "The undamming of America."

⁷⁸ As Janine MacLeod observes water has "long been regarded as a place of uncertainty and risk; it can be navigated more or less bravely, but never controlled" (MacLeod, *Thinking with Water*, 57).

electricity by harnessing water's movement through the use of turbines. Coal-fired power plants also harness, control, and contain water's circulation as they burn coal in order to produce steam (water) to turn a turbine.

BLACK AND NATIVE ELECTRIFIED IMAGINARIES

Taking leakiness as an overarching approach enables me to put Native Studies and Black Studies in conversation. Tiffany Lethabo King uses the language of leakiness, seepage, and liquidity to describe why genocide and slavery cannot be contained:

neither has edges, yet each is distinct. Each form of violence has its own way of contaminating, haunting, touching, caressing, and whispering to the other. Their force is particular yet like liquid, as they can spill and seep into the spaces that we carve out as bound off and untouched by the other.⁷⁹

The language of leakiness allows an analysis of enslavement and colonial genocide as distinct, yet also liquid, contaminating, spilling, and seeping into each other.

King "offers up the possibility that specific forms of Black abolition and Native decolonization interrupt normative processes of white human self-actualization (settler-conquistador formations). In fact, Black abolition and Native decolonization as projects that frustrate liberal (and other) modes of humanism offer new forms of sociality and futurity."⁸⁰ Kings' assertion is mirrored in the NDN Collective's LANDBACK Manifesto, which

⁷⁹ King, Tiffany Lethabo. *The Black Shoals: Offshore Formations of Black and Native Studies* (Durham: Duke University Press, 2019), x.

⁸⁰ King, The Black Shoals, xv.

recognizes that the struggle for decolonization⁸¹ and LANDBACK "is interconnected with the struggles of all oppressed Peoples." They advocate for a "future where Black reparations and indigenous LANDBACK co-exist. Where BIPOC collective liberation is at the core." Taking my cue from King and the LANDBACK Manifesto, I strive to put Black Studies and Native Studies in conversation throughout *The Leaky Grid* because the struggles for abolition, liberation, and decolonization in what is now known as the United States require accounting for and contending with white supremacy, the afterlives of chattel slavery, and the ongoing matrix of colonial power.

The messy, uneasy, and diverse Indigenous-led coalition in Laguna Pueblo author Leslie Marmon Silko's epic *Almanac of the Dead*, which I write about at length in the third short, "If the lights went out all over all at once," teaches readers that sameness need not, nor

⁸¹ As Eve Tuck and K. Wayne Yang remind, the process of decolonization is more than a metaphor (Tuck and Yang 2012). Integral to decolonization is the return of stolen land to Indigenous nations as a means of spatially and materially enabling Indigenous sovereignty, self-determination, and land relations.

Tuck, Eve and K. Wayne Yang. "Decolonization is not a metaphor," *Decolonization: Indigeneity, Education & Society* 1.1 (2012):1-40.

Important to a project like this, which works to put Black Studies and Native Studies in conversation with each other, is Tapji Garba and Sara-Maria Sorentino's response to Tuck and Yang. In "Slavery is a Metaphor," they offer a critical analysis of Tuck and Yang, arguing that "Decolonization is Not a Metaphor," reduces slavery to forced labor, creates a false division between the material and symbolic, forecloses an analysis of slavery by engulfing it in the settler colonial paradigm, and subsumes all other liberatory struggles into decolonization.

Garba, Tapji and Sara-Maria Sorentino. "Slavery is a Metaphor: A Critical Commentary of Eve Tuck and K. Wayne Yang's 'Decolonization is Not a Metaphor." *Antipode*. 52.3 (2020): 764-782.

NDN Collective. n.d. "Land Back Manifesto." LANDBACK. https://landback.org/manifesto/.

⁸³ NDN Collective, "Land Back Manifesto."

should not, be a prerequisite for coalition. Octavia Butler's *Parable of the Sower*, which is central to chapter two's efforts to reimagine California's relationship to fire, also shows readers that sameness is not required for love, friendship, or solidarity, and that difference makes a community stronger. As modeled by Silko and Butler's literary imaginaries, afrofuturisms and Indigenous futurities offer some of the most vital, nuanced, and nonlinear paths forward for (re)making this planet habitable for the complicated web of human and more-than-human kin who call it home.

Black Studies has the following to offer Native studies: a close attention to forced labor and states of unfreedom, enclosure, and incarceration; critiques of plantation ecologies and economies; the Black Radical Tradition; how to matter, make art, and make life in the diaspora; paths forward for decolonizing the mind; Abolition; Black joy; Afrofuturism.

Native Studies has the following to offer Black Studies: decolonization as more than a metaphor for freedom but as material rematriation of Indigenous lands and waters; LANDBACK; radical embodied sovereignty outside of and beyond the Euro-Western nation state; the "lush promise" (i.e. Indigenous futurities);⁸⁴ survivance; land and water protection.

While attempting to put Blackness and Indigeneity in conversation with each other about electrification, modernity, and the possibility for livable futures, *The Leaky Grid* is built on the understanding that racial categories are cultural constructions⁸⁵ and is not an attempt to

⁸⁴ Laura Harjo draws on Joy Harjo's image of the "lush promise" from her poem "Map to the Next World" to describe the aims of Indigenous futurities in her book *Spiral to the Stars*.

⁸⁵ Drawing attention to the cultural constructedness of racialized identities works against the naturalization of racial categories while refusing to ignore the ways that race is read on a body, or the very real embodied and material consequences of race. As Voyles writes, "race is a

reify these categories across time or place. In placing Blackness and Indigeneity in conversation, *The Leaky Grid* takes anti-Blackness and settler colonialism as distinct, yet coconstitutive structures of US modernity, while not essentializing the categories of Black, Native, or White settler, as doing so erases other structures of power and the experiences of mixed-race people, settlers of color, refugees, indentured servants, and other identities for which the three categories of Black, Native and White settler do not readily account for. This comparative project works to sit with the aporias and incommensurabilities between Blackness and Indigeneity. *The Leaky Grid* does not imagine reductive easy agreement or solidarity between Black and Native Americans. Doing so would erase the way antiblackness operates within Native communities, ⁸⁶ and the ways that Black Americans have also been part of the US imperial project. ⁸⁷

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Batiste, Stephanie. Darkening Mirrors: Imperial Representation in Depression-Era African American Performance. Durham: Duke University Press, 2012.

discursive technology with ... deadly material effects ... race is a *discourse* powerful enough to make *genocide* possible."

Voyles, Traci Brynne. *Wastelanding: Legacies of Uranium Mining in Navajo Country* (Minneapolis: University of Minnesota Press, 2015), 15.

⁸⁶ One example of the ways antiblackness operates within Native nations is demonstrated in the ongoing fight for tribal recognition by the descendants of those enslaved by the Chickasaw, Seminole, Mvskoke Creek, and Choctaw nations. The Chickasaw, Choctaw, Seminole, Mvskoke Creek, and Cherokee Nations all participated in the enslavement of African and African descended peoples during US chattel slavery. However, the Cherokee Nation is currently the only Nation that grants tribal citizenship to descendants of the enslaved. Descendants articulate their advocacy to be tribal citizens as the ultimate recognition of tribal national sovereignty and a crucial part of decolonization/taking an anticolonial stance toward the US.

⁸⁷ For example, Stephanie Batiste's book *Darkening Mirrors: Imperial Representation in Depression-Era African American Performance* details the ways that Black Americans participated in US imperialism as part of westward expansion. Her chapter, "Harlem Rides the Range: Expansion, Modernity, and Negro Success," on the figure of the Black cowboy, is particularly useful here.

The conversation *The Leaky Grid* works to stage between Black studies and Native studies does draws on Sylvia Wynter's critiques of "monohumanist" thought and the overrepresentation of the White, settler Enlightenment man as human. Wynter's careful tracings of Western humanism have

functioned as a crucial pivot point in Black studies that has enabled the emergence of a shared critique to emerge between Black and Native Studies ... 'Rational Man,' or the ideal version of the human, was being invented through the construction of the sensuous and irrational Negro and Indian as 'a category of otherness or of symbolic death' ... This form of conquistador humanism and its view of the Native and Black Other – as a space of death – produced and sustained a genocidal violence and brutal system of enslavement ... This ranking system, though revised, still positions Indigenous and Black people at its bottom rungs."88

What does this have to do with electricity? Everything.

Electrified modernity, a term I employ throughout *The Leaky Grid* to reference the ways that US modernity in the twentieth and twenty-first century requires electrification, exists at the expense of Indigenous land and water relations and is denied to and experienced unevenly by racialized communities. The US power grid is built on stolen land, and powered by stolen water and other resources. It is an infrastructural system that fuels settler futures on Turtle Island's lands and waters. Electricity's metonymic relationship to notions of progress is also built, in part, on General Electric's (GE) white-washed figure of the "electric slave," which they employed in advertisements during the Interwar period as a way of creating "electric

⁸⁸ King, The Black Shoals, 15-16.

consciousness" in the US. In other words, a formative part of US electric consciousness renders electricity equivalent to the figure of the slave. In *The Leaky Grid's* commitment to unsettling the colonial man as human, it prioritizes electrified Black and Native cultural production in order to ensure that Black and Native electrified cultural production is central to imagining energy, environments, modernity, and the future otherwise.

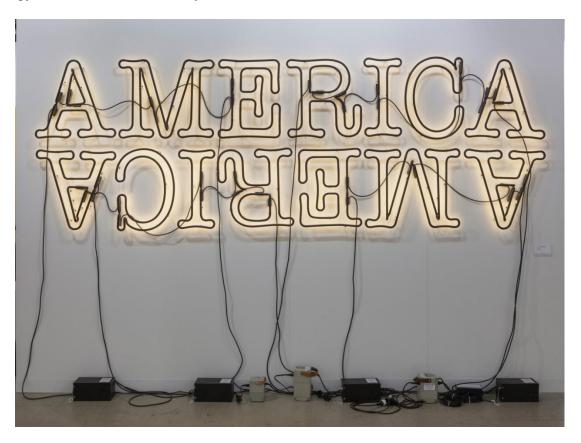


Figure 2. Double America 2 by Glenn Ligon, part of his series of "Neons." The photograph is part of The Broad's Collection.

Glenn Ligon's "Double America 2" is one example of Black electrified cultural production. "Double America 2" is an installation that uses electricity to make art about the Black American experience. Ligon's installation can be read as a neon rendering of the two America's of Jim Crow segregation, or as a neon rendering of W.E.B. Dubois' concept of

"double-consciousness," which Dubois coined to refer to the experience of Black Americans after so-called emancipation. Dubois defined double-consciousness as a

sense of always looking at one's self through the eyes of others, of measuring one's soul by the tape of a world that looks on in amused contempt and pity. One ever feels his twoness,—an American, a Negro; two souls, two thoughts, two unreconciled strivings; two warring ideals in one dark body, whose dogged strength alone keeps it from being torn asunder."

In both interpretations, Ligon's electrified installation resists an easy single, unifying, or linear narrative about the US. The upside down, backwards, and mirrored reflection forces viewers to consider the existence of additional narratives and experiences of "America." Through its incorporation and proud display of the various cables, power adapters, and plugs that make the "Neon" possible, Ligon also draws attention to the infrastructural and material realities of electrification. With all the dangling power cables, what powers Ligon's double America is on full display: electricity.

First Nations electronic music group We are the Halluci Nation's (formerly known as A Tribe Called Red) 2017 song "The Virus" and its accompanying music video, which feature Black American songwriter, poet, and performance artist Saul Williams, are integral to my thinking about property, colonial worldmaking, and Black and Native resistance. While not central to my engagement with "The Virus," it is important to note that the song and accompanying music video are forms of digital and electronic media only made possible by electrification and the power grid. "The Virus" represents the varied Indigenous and Black

⁸⁹ Dubois, W.E.B. Souls of Black Folk (Mineola: Dover Thrift Editions, 1994), 2.

cultural lifeworlds electricity can spark, and the different artistic and political solidarities that creative collaboration can bring into being.

The music video opens with a quick shot of allied Native Nations' flags flying at Standing Rock, before quickly cutting to footage of tanks and US military gear. In the lefthand corner of the screen, a time stamp appears that reads "Turtle Island 2047." The DJs of We are the Halluci Nation speak first, their lyrics resonating throughout a dark room filled with a circle of people. As they recite "We are the Halluci Nation. Our DNA is of earth and sky. Our DNA is of past and future," the camera pans around the room, spotlighting many faces, including children and elders. Then, nearly one minute into the video, Williams steps out of the circle of people and into the center, onto a lit seal of the Halluci Nation. As he does so, he recites,

The virus took on many shapes: the bear, the elk, the antelope, the elephant, the dear, the mineral, the iron, the copper, the Coltan, the rubber, the coffee, the cotton, the sugar. The people. The germ traveled faster than the bullet. They harvest the mountainside, protect the crops, herd the cattle. The people. They separated the women and children from the men. They divided us according to the regional filters of their minds. The violence of arrogance crawls through the air, nestles into the geospatial cortex. We are not a conquered people. 91

William's poetic and musical recitation draws attention to settler colonial constructions and impositions of identity categories such as gender and race, while showing the ways that these categories change from region to region. Williams also draws attention to the role of the land, and how the relationship between the land and people shapes culture. The music video depicts

⁹⁰ We are the Halluci Nation, "The Virus," 00:36.

⁹¹ We are the Halluci Nation, "The Virus," 00:48.

footage from the American Indian Movement, Black Lives Matter, Standing Rock, and other liberation and resistance movements from across the globe, uniting colonized peoples under Williams' repeated sonic banner, "We are not a conquered people."

Williams confirms later in the song that "The missionaries never hid their perspective. Prospectors of land," drawing attention to the ways that colonial extraction, cultivation, and ownership of the land contours settler culture and settler relations to other life both human and more-than-human. As "The Virus," articulates, central to (electrified) colonial modernity is the Euro-American concept of property. Property, a tool of enclosure, capital, extraction, control, and objectification is at the heart of the US colonial project, and shapes the power grid's material, historical, and imagined contexts. I explore the property relations required by electrification in chapter one, "Siphoning and Sabotage," through an exploration of electricity theft, and in chapter three, "No one had asked the water what it wanted," through an examination of land and water defense.

Dubois wrote that he came to understand "whiteness as the ownership of the Earth forever and ever." Property is central to an analysis of how the grid mediates electricity in the US, and to US modernity at large. Organizing environmental, social, political, and economic life around private property builds a world where land and more-than-human beings are reduced to resource-objects, instead of one where energy is a force found in all life – like it is in Linda Hogan's *Solar Storms*, connecting humans and the more-than-human world in reciprocal exchange. Instead of taking an embodied approach to energy, US colonial culture takes an extractive one, viewing energy as a privately owned and controllable resource.

⁹² We are the Halluci nation, "The Virus," 2:40.

⁹³ Dubois, W.E.B. "The Souls of White Folk." The Independent (1910), 29.

Mvskoke scholar of Indigenous futurity Laura Harjo shares Indigenous North American understandings of energy, not as a resource, but as life force. Harjo writes that "all entities embody energy, and this matters because the way in which we treat other entities can tamper with, support, sustain, strengthen, undermine, or hinder their life forces." Harjo's understanding of energy differs from a Western scientific/resource approach, as it is detailed in *Essentials of Environmental Science*, which defines energy as "the ability to do work" or "energy = power x time," which again, reduces the concept of energy to something that can be easily harnessed, controlled, and measured.

My electrified analyses in *The Leaky Grid* are coproduced by the Black American and Native North American cultural and scholarly production that shape the project, and the diverse environmental knowledges they produce. The Black and Native electrified imaginaries foregrounded throughout not only diagnose colonialism's ongoing cultural, political, and environmental violence. They also make worlds: they open up the possibility of other formations of power, identity, resistance, and environment. *The Leaky Grid's* opening chapter centers Ralph Ellison's *Invisible Man* — whose unnamed protagonist siphons electricity to power the radio phonography and 1,369 light bulbs in his subterranean refuge — to illuminate the act of electricity siphoning, and the relationship between Blackness, environmental racism, and the history of coal-fired electrification. Chapter two examines California's increasing electricity equipment-sparked superfires. It puts colonial land management under stress by turning to Octavia Butler's Black feminist speculative future California found in *Parable of*

⁹⁴ Harjo, *Spiral to the Stars*, 39.

⁹⁵ Friedland, Andrew and Rick Relyea. *Essentials of Environmental Science* (New York: W.H. Freeman and Company, 2015), 35.

the Sower, and Indigenous Traditional Ecological Knowledge from Native California, such as that practiced and written about by Chumash land defender Pilulaw Khus. Chapter three is submerged in the rising waters of Chickasaw author Linda Hogan's Solar Storms — a fictionalized account of Indigenous resistance to the James Bay hydroelectric project. Solar Storms conjures for readers a world where energy is not a resource to be extracted, but a force that animates all life.

(Electrical) Shorts

An electrical short (also known as a short circuit) occurs when an accidental connection is formed between two conductors that did not exist before. The short is the result of the electrical current not following its intended path because of the new connection. Inspired by electrical shorts, especially that they result from new connections and are an unintended flow of redirected current, I have framed each chapter with a "short," in which I have given myself creative license as a critical curator, ¹ reader, and writer to explore the unintended connections I found while working on *The Leaky Grid*.

While each chapter lingers with the electrified imaginaries of the primary texts it centers, the interspersed "shorts," allow me to bring in other electrified cultural production that contributes to the project's commitment to comparative and multimedia methodologies. The "shorts" also interrupt and redirect the flows of *The Leaky Grid's* more traditional chapters. The moments where I interrupt myself are not only a playful moment of electrified metaphoricity, but are also a formal commitment to the polyvocality made possible by narrative porosity.

The first short focuses on Jimi Hendrix's electrified technological praxis and Janelle Monáe's android Afrofuturism. Both musicians participate in an electrified sonic afro-

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¹ My understanding of the role curatorial work is inspired by Kadji Amin, Amber Jamilla Musser, and Roy Pérez's introduction to *ASAP*'s special issue on queer form, the three give "scholars license to think together concepts and works of art that might appear inconsonant according to strictures of historical period, genre, medium, or perceived cultural context, but whose relevance and discursive imbrication become visible through the activity of the queer critic, whose expressed desires or politics then have space to become heuristic starting points."

Kadji Amin, Amber Jamilla Musser, and Roy Pérez, "Queer Form: Aesthetics, Race, and the Violences of the Social," *ASAP* 2.2 (2017): 230.

modernity that links Blackness, electricity, and progress/the future. The second short traces a literary history of electricity and the body. It presents cultural and literary production, centering Jean Toomer's poem "Her Lips are Copper Wire," about the relationship between electricity, the body, sensuality, and vitality as a provocation to think about the currents of the human body, and to highlight examples of electricity uncontained by the infrastructure of the power grid. The third short turns to Laguna Pueblo author Leslie Marmon Silko's epic *Almanac of the Dead*. In Silko's sprawling novel, a diverse Indigenous-led coalition plans to bring about total electrical power failure in the US, starting with the destruction of the Glen Canyon Dam. The novel metonymically fuses the power grid and the US colonial nation state and critically questions cultural imaginaries of electricity as inherently progressive, instead asking readers to dwell in what the dark makes possible.

1

Siphoning and Sabotage: Ralph Ellison's Invisible Man and US Electricity Theft

"Meanwhile, I enjoy my life with the compliments of Monopolated Light & Power. Since you never recognize me even when in closest contact with me, and since, no doubt, you'll hardly believe that I exist, it won't matter if you know that I tapped a power line leading into the building and ran it into my hole in the ground. Before that I lived in the darkness into which I was chased, but now I see. I've illuminated the blackness of my invisibility – and

vice versa."

— Ralph Ellison, *Invisible Man* (1952)

INTRODUCTION

In a powerful moment of alternative electrified literary worldmaking,¹ the unnamed protagonist of Ralph Ellison's *Invisible Man* steals electricity to power the 1,369 lightbulbs and one radio phonography in his subterranean refuge. When describing his theft from Monopolated Light & Power in the novel's prologue, Invisible Man frames it as "an act of

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¹ When I employ the concept of "worldmaking," I draw on Mark Jerng and Dorinne Kondo's work on the relationship between cultural production, narrative and genre, race, and worldbuilding. Jerng's theory of racial worldmaking analyzes "narrative and interpretive strategies for constructing relationships between noticing race and building worlds" (*Racial Worldmaking*, 2). Kondo writes that, "we make, unmake, remake race within specific cultural and historical political economies ... Worldmaking' evokes sociopolitical transformation and the impossibility of escaping power, history, and culture. Worlds, like language, are pregiven, and remaking must always work with this givenness" (*Worldmaking*, 29). Kondo goes on to elaborate that fictional and nonfictional genres "make worlds through form and narrative" (*Worldmaking*, 44).

Jerng, Mark C. Racial Worldmaking. New York: Fordham University Press, 2017.

Kondo, Dorinne. *Worldmaking: Race, Performance, and the Work of Creativity*. Durham: Duke University Press, 2018.

sabotage" and a "fight" that "battle[s]" against systems of (infra)structural power.² *Invisible Man* features electrically charged scenes throughout, including the illicitly illuminated prologue, the "Battle Royal" scene's electrified rug, and the shocking "Out of the Hospital" scene with its direct reference to the electric chair. Each of these literary moments depict the novel's unnamed protagonist coming into contact with the larger infrastructural energy system of the US power grid.⁴ Tapping into Ellison's electrified imaginary shines light on the relationship between race and electricity to bring attention to the cultural and historical narratives shaping how electricity is perceived in US culture.⁵

In the prologue, and throughout the novel, Ellison draws on electricity to show how it enforces historical and ongoing structures of power, including white supremacy and

² Ellison, Ralph. *Invisible Man* (New York: Vintage Books Edition, 1972), 7.

³ While this type of fight is spelled "Battle Royal" (without an "e") in *Invisible Man*, twenty-first century readers may be more familiar with the spelling of this type of fight with an "e" – Battle Royale. Battles Royale refer to fights between many different competitors that last until there is a single victor. It has now become its own genre of games, films, and fiction thanks to the genre-defining 1999 Japanese novel *Battle Royale* by Koushun Takami and the subsequent 2000 film of the same name, which helped popularize the spelling with an "e."

⁴ Lieberman also observes that "by focusing on the points where largescale systems interface with individual lives, Ellison illuminates dimensions of American social and technological life" (*Power Lines*, 175).

⁵ While this chapter centers on Invisible Man and thus focuses on electricity theft in a US context, I would be remiss not to acknowledge that electricity siphoning takes place around the globe. I read *Invisible Man's* representation of electricity theft as connecting Harlem with the other literary worlds – such as Mohsin Hamid's satirically generalized fictional Asia in *How to Get Filthy Rich in Rising Asia* and the fantasy Mexico City of Silvia Moreno-Garcia's *Uncertain Dark Things* – powered by stolen electricity. My focus on the US is not to erase electricity theft in other cultural and geographic contexts, such as in India, South Africa, Pakistan, and Haiti (Smith, "Electricity theft"). Instead, my focus on the US aspires to hookup the sites where electricity theft takes place in the US with the movements, electrifictions, theorizing, and practices coming out of the global south as a way of producing solidarities that puncture the shiny techno-narratives of progress and modernity that the US tells about itself, while also drawing attention to the different scales of unevenness and impact required by electrified modernity.

antiblackness. Ellison's literary representations complicate cultural associations that link electricity to concepts of progress and liberation, instead showing that electricity, and the ways in which electrification transformed the US, are not inherently progressive. Thomas Vogler writes that electricity theft is "Ellison's way of illustrating ... the power struggle that occupies most of the novel." Instead of an uncomplicated force for progress, electricity becomes a conduit through which structures of power are encountered and resisted.

Experiences of and interactions with energy and infrastructure are mediated by stories, imaginaries, cultural representations, and experiences. Michael Rubenstein offers the succinct theoretical term *electrifiction* (which transforms electrification by deleting the "a") "as a very compact way of describing, from a culturalist point of view, the multiple and competing discourses that circulated around the technological enterprise of electrification." Although

⁶ Other literary scholars have noted in their own readings of the role of electricity within nineteenth and twentieth century literature that electricity signifies in multiple, sometimes contradictory ways. Electricity has been used to signal liberty and to metaphorize power (Smith, "Bodies Electric," 114), is simultaneously a source of oppression and progress (Lieberman, *Power Lines*, 15), and draws attention to cultural binaries that divide utility and the aesthetic (Rubenstein, *Public Works*, 21, 29).

⁷ Vogler, Thomas A.. "*Invisible Man:* Somebody's Protest Novel." *The Iowa Review* 1, no. 2 (1970): 79.

⁸ As Caleb Smith has noted, electricity has shaped the imaginary, lexicon, and aesthetic representation of power. He observes that, "from Melville's Ahab, who overmasters his three mates aboard the Pequod by 'shock[ing] into them the [...] fiery emotion accumulated within the Leyden jar of his own magnetic life'; to Ellison's Invisible Man, who begins his awakening into racial consciousness when he is forced by white men onto an electrified rug that throws his body into grotesque, humiliating convulsions; to Foucault, who famously conceived power in terms of decentered networks, resistances, and flows," many writers of the nineteenth and twentieth centuries use electricity as a metaphor for power (Smith "Bodies Electric," 114).

⁹ Rubenstein theoretically retools the term "electrifiction," tracing its history back to Lenin and the Communist Party: "Lenin coined his now-famous definition of communism as 'Soviet power plus electrification' ... Lenin's detractors, however, 'are said to have ridiculed the program, suggesting that the 'a' be deleted from electrification.' My own definition of

writing about the creation of Ireland's national electricity grid and the ways electricity and other "public works" are represented in Irish literature, Rubenstein's "electrifiction" is useful to my reading of electricity within a US cultural context as it solders together electricity and the study of narrative, taking seriously a literary studies approach to utilities where "fiction means much more than simply a story that is not true." Centered on Ellison's *Invisible Man* and its opening representation of electricity theft, this chapter analyzes a constellation of US electrifictions focused on the relationship between Blackness and electricity.

While others have written about the role of electricity in *Invisible Man* – such as Jennifer Lieberman's reading of Ellison's "technological humanism" and analysis of the ways the novel's electrified rhetoric resists easy closure, and Douglas Ford's focus on the role of networks in the novel and its representation of the increasingly difficult-to-define boundaries between the human and technology¹¹ – I strive to build on their work by approaching the novel as an important US electrification about utility theft. Going beyond a traditional literary studies close reading of *Invisible Man*, my reading triangulates Ellison's novel with a history of General Electric's (GE) "electric slave" advertisements from the Interwar period, and concludes with an analysis of a 2010 WXYZ-TV Detroit news segment focused on electricity theft. I incorporate GE's advertisements in order to reexamine US cultural constructions of increased electrification as a progressive force, and to focus instead on the ideologies of unfreedom, objectification, and exploitation that undergird electrified modernity. While the

electrifiction, though the term is borrowed from GOELRO's antagonists, is far less insulting than it was originally intended to be" (Rubenstein, *Public Works*, 132).

¹⁰ Rubenstein, *Public Works*, 132.

¹¹ Liberman, *Power* Lines; Ford, Douglas. "Crossroads and Cross-Currents in Invisible Man." *Modern Fiction Studies* 45, no. 2 (1999): 887-904.

2010 news segment may seem of a different place and time than Ellison's novel, I pair the two because they both are electrifictions focused on moments where racialized individuals come into contact with the largescale system of the power grid and the structures of power the grid both metaphorizes and materializes. The news segment showcases the afterlives of the moment in which Ellison was living and writing – where electricity was being shaped as a commodity (instead of a public work or human right) by a hodgepodge of private corporations as they developed the US power grid.

Invisible Man represents electricity theft as diagnosing the uneven access to and impacts of electrified modernity, while also (temporarily) creating alternative infrastructural relationships that refuse exclusion; whereas, the news segment, titled "Electricity thieves stealing power in Detroit" and available for streaming on WXYZ-TV Detroit's YouTube channel, casts the act of stealing electricity as a "shocking crime," and as a "dangerous world" of theft and illegality. As in Invisible Man, the electricity thieves in the news segment redistribute electric current through illicit acts of siphoning to materially intervene in and reimagine the larger infrastructural system. Acts of electricity theft take advantage of the porosity of the power grid to co-opt and redirect its circulatory aims, revealing the impossibility of truly controlling and containing movement and circulation. My analysis of the news feature — which operates through an antiblack and carceral logic while occluding larger conversations about the very real impacts of social and environmental injustice, racial capitalism, ¹² and

¹² In *Black Marxism: The Making of the Black Radical Tradition*, Cedric Robinson outlines how and why racism is central to capitalism, not auxiliary to it.

Robinson, Cedric. *Black Marxism: The Making of the Black Radical Tradition*. Chapel Hill: University of North Carolina Press, 1983.

uneven access to electricity— works to extend my reading of Ellison in order to shine light on the twenty-first century relationship between electricity, Blackness, and white supremacy.

GENERAL ELECTRIC'S "ELECTRIC SLAVE"

Ellison's electrified literary worldmaking is born out of the early twentieth century's decades of rapid electricity-sparked transformation. According to David Nye, "in a single lifetime between 1880 and 1940, the process of electrification transformed the landscapes of the city, Factory, home, and farm." The adoption of electricity, Nye writes, "had profound consequences for ... the total social construction of reality, including the futures that Americans imagined," and, "helped to define modernity, progress, and physical and social well-being." While the US national grid was one of the first to be assembled, it was not created by a centralized nation state, as is the case of other national grids — many of which were constructed in times of postcolonial nation building. Unlike grids that are run and powered by the state, the US electric grid was built by private, for-profit utilities. Instead of electricity being seen as a public work (or means for national independence after external colonization), it was understood as a commodity and means of profit.

Working within Robinson's theoretical genealogy, Laura Pulido reminds readers that all "capitalism is racial capitalism."

Pulido, Laura. "Geographies of race and ethnicity II: Environmental racism, racial capitalism and state-sanctioned violence." *Progress in Human Geography* 41.4 (2016): 4.

¹³ Nye, *Electrifying America*, 381.

¹⁴ Nye, *Electrifying America*, 381.

¹⁵ Nye, *Electrifying America*, 141.

¹⁶ Nye, *Electrifying America*, 139-141.

¹⁷ Nye, *Electrifying America*, 139-141.

Shortly after World War I, GE launched their advertising campaign promoting an "electric consciousness." This campaign was created to convince Americans that they needed to electrify their homes and businesses — that electricity was a necessary commodity. To do this, GE constructed an electrifiction, a succinct advertising narrative, that linked electricity to notions of linear, technological progress, modernity, and the future. Part of this campaign hinged on the metaphor of the "electric slave": phrases from this campaign included slogans like "Its Shoulders Never Tire" and "Don't keep me chained in idleness. Put me to work for you." As Lieberman has noted in her analysis of these marketing materials, while GE evokes systems of enslavement, they never directly reference US chattel slavery or the Atlantic slave trade. Their promotional narratives rely on romanticized historical fictions, referencing the building of the pyramids and vague allusions to "older democracies." GE goes so far as to make the argument that enslavement is essential to systems of democracy in an internal essay published in the June 1922 edition of the *General Electric Review*:

It is a strange fact that there is just one point about the old successful democracies that is always forgotten. They had slaves to cultivate their fields, dig their ditches, wash their plates and dishes and to do all those things that no one wants to do ... it should be noted that it was not until they had these slaves that they could devote their time to that literature and art which has made them famous throughout the ages. Yes — it is

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¹⁸ Ford, "Crossroads and Cross Currents," 896; Lieberman, *Power Lines*, 331-332; Nye, *Electrifying America*, 265.

¹⁹ General Electric advertisement, 1932 qtd. in Lieberman, *Power Lines*, 331-332.

²⁰ Hewett 1922, qtd. in Lieberman, *Power Lines*, 331-332.

absolutely true that we are in a bad way in our modern democracies because we have no slaves.²¹

While erasing the US system of chattel slavery and the ways its afterlives continue to shape US society, politics, identities, and environments, the GE essay makes the argument that US democracy and cultural production might require enslavement. It points out that the abundance and leisure of certain classes of people are necessarily dependent on the exploitation of the energy of others, while promoting a post-racial "electric slave" as a progressive and permissible solution to old systems of forced human labor. GE's "electric slave" is not the only concept that collapses technological progress and forced labor. The word "robot" encodes a similar connection between unfreedom, exploitation, and technology. Robot comes from 'robota,' which is the Czech word for serf labor, drudgery, and hard work.²² It entered into English through a sci-fi drama by Czech playwright Karel Capek in the 1920s, arising at the same time that GE was promoting "electric consciousness." GE's advertisements show how systems of enslavement and ideologies of unfreedom contour US modernity, cultural relationships to the notion of progress, and electrification.

Other scholars interested in the relationship between US culture and energy have also connected US energy systems more broadly with the system of chattel slavery. Katherine Yusoff and Stephanie LeMenager show the ways in which US energy use must be contextualized within the larger history of chattel slavery and its afterlives. Yusoff, in a move that theorizes the relationship between environmental extraction, settler colonial conquest, and

²¹ Hewett 1922 qtd. in Lieberman, *Power Lines*, 331-332.

²² Kakoudaki, Despina. *Anatomy of a Robot: Literature, Cinema, and the Cultural Work of Artificial People.* New Brunswick: Rutgers University Press, 2014.

enslavement, describes slavery as "a unit of corporeal energy,"²³ writing that "slavery weaponized the redistribution of energy around the globe through the flesh of black bodies."²⁴ Yusoff examines the ways that cultural constructions of property and ownership are at the heart of both chattel slavery and colonial environmental extraction, writing that "the movement of energy between enslaved bodies in plantations, plants, long-dead fossilized plants, and industrialized labor is a geochemical equation of extraction in the conversion of surplus."²⁵ The connection between electrification and enslavement, explicitly made by GE, not only shapes how electricity mediates human relations with the environment, objectifying the more-than-human world through systems of property, extraction, and exploitation, it also provides conceptual context for electricity in the US — as a commodity to be owned and as a materialization of larger white supremacist power structures.

ELLISON'S BATTLE ROYAL AND ELECTRIC RUG

Given that a formative part of US electric consciousness renders electricity equivalent to the figure of the slave, the history of electricity raises questions about its use and weaponization. Grisha Coleman and Thomas F. DeFrantz introduce their conversation about Black technological praxis by asking, "What if we reframe questions surrounding the goals of 21st century technology in the context of a neoliberal assault on black corporeality?"²⁶

²³ Yusoff, Kathryn. *A Billion Black Anthropocenes or None* (Minneapolis: The University of Minnesota Press, 2018), 7.

²⁴ Yusoff, A Billion Black Anthropocenes or None, 15.

²⁵ Yusoff, A Billion Black Anthropocenes or None, 16.

²⁶ Coleman, Grisha and Thomas F. DeFrantz. "Reach, Robot: Afrofuturist Technologies."

We Travel the Space Ways: Black Imagination, Fragments, and Diffractions, edited by Henriette Gunkel and Kara Lynch (Deutsche Nationalbibliothek, 2019), 53.

Coleman and DeFrantz's trenchant question introduces my reading of the "Battle Royal" scene in the first chapter of *Invisible Man*, where an electrified rug is used as one perpetrator of antiblack violence in a larger constellation of White supremacist acts that work to define Invisible Man and his youthful compatriots' Blackness through suffering. The "Battle Royal" scene emphasizes the way electrical technology enacts state-sanctioned racialized violence by enabling assaults on Black corporeality.

Electrification lit up the night, decoupling labor from a natural seasonal and light cycle and making it possible for laborers to work around the clock. Nonetheless, Ellison's first chapter exposes the ways that labor continued to be influenced by racial and gendered power structures. It opens with a sensuous nude dance performed by a blonde-haired blue-eyed woman. The "Battle Royal" competitors are all young Black men. The White male well-to-do orchestrating this encounter play up the interaction of race, sexuality, and gender by forcing the Black youth to look at the White dancer, reveling in their terror, curiosity, and imagined desire, and then punishing them for looking. Both the dancer and youth perform specific stereotypical and racialized roles for their White male audience. The White female dancer acts as an intentional foil that makes legible the boys' gender and race. Troublingly, their Black masculinity is defined for them by the White male onlookers in relation to the dancer, in a move that reifies race and normative White femininity, erases Black women through exclusion, and reinscribes White male dominance. The US flag tattoo emblazoned across the sinuous torso of the dancer symbolically links US nation building with the reification (through performance) of race and gender.

Later in the scene, after being forced to fight in a blindfolded "Battle Royal" with other Black youth, Invisible Man and his opponents are given their "reward" in the form of money

laid out on what appears to be an innocuous rug. However, the rug is electrified, and the "reward" is yet another part of the twisted entertainment – the narrator and his comrades are electrocuted. Invisible Man narrates, "I lunged for a yellow coin lying on the blue design of the carpet, touching it and sending a surprised shriek to join those rising around me. I tried frantically to remove my hand but could not let go. A hot, violent force tore through my body, shaking me like a wet rat. The rug was electrified."²⁷ The Black youths' labor is literally devalued: they are not compensated for their labor, competing in the "Battle Royal," and are instead forced to continue to struggle while avoiding the electrified rug for meagre recompense (much of which turns out to be worth nothing). The rug makes explicit the relationship between Black suffering, White supremacy, and electrical technology that shapes other electrified weapons employed by the state and law enforcement, such as the electric chair, electric fences, and tasers.

The history of the taser is racist, as Chamara Moore traces in their work on electrifying Blackness, and Darius Rejali outlines in *Torture and Democracy*. The taser was invented as a replacement for law enforcement officers' use of cattle prods to suppress and overpower people.²⁸ Cattle prods were first used by law enforcement in Alabama against civil rights protestors in 1963. ²⁹ However, the violent spectacle of their success was part of their own undoing – they were largely renounced in the decade after their first use (in part, according to Rejali, because they rendered the comparison between civil rights protestors and cattle too explicit, too easy, for popular media and onlookers to make), to be replaced by two innovations

²⁷ Ellison, *Invisible Man*, 27.

²⁸ Rejali, Darius. *Torture and Democracy* (Princeton: Princeton University Press, 2007), 227-229.

²⁹ Rejali, *Torture and Democracy*, 227-229.

in what Rejali terms "electrotorture" – the stun gun and the taser.³⁰ The taser, invented by NASA scientist John Cover, was conceptualized as a tool to immobilize threats. Cover based the taser on, and named it after, an electrifiction – one of his favorite childhood books, *Tom A*. *Swift and his Electric Rifle*. Book ten in the Tom Swift series, published in 1911, depicts Tom using his latest invention, the electric rifle, while on safari in Africa. This genealogy of the taser imagines the (then as yet) fictive electric rifle participating in the colonial fantasy of big game hunting. The novel also imagines that the rifle's ability to recalibrate the voltage of its electric bolt makes it the perfect weapon for the serialized Swift to "defend" himself against any Africans he may encounter. In the novel, Swift is overtly racist and disparaging, referring to Africa as the "dark continent" and describing the Africans he encounters as "hideous in their savagery." ³¹

The racist and colonial conceptual imaginary of the taser, like the rug in *Invisible Man*, provides the necessary historical and imaginative contexts for the racist ways the US colonial police state continues to weaponize electricity today. As these instruments of weaponized electricity show, electricity is something that humans cannot safely interact with unmediated – thus, the majority of people's interactions with electricity are mediated via electricity infrastructure. When electricity is weaponized, the aim is for specific beings to come into the shock of contact, through force, with unmediated electricity. Electricity requires a conductor (I will develop the importance of who and what is conducting the current at greater length in

³⁰ Rejali, *Torture and Democracy*, 227-229.

³¹ Appleton, qtd. in Lartey, Jamile. "Where did the word 'Taser' come from? A century-old racist science fiction novel." *The Guardian*, November 30, 2015. https://www.theguardian.com/commentisfree/2015/nov/30/history-of-word-taser-comes-from-century-old-racist-science-fiction-novel.

the next section). When electricity is weaponized, those wielding the weapon (and, as the above examples show, the wielders are often US law enforcement and other White supremacist colonial powers) violently force people, like Invisible Man, to become electricity's conductor.

Despite the initial shock of the weaponized rug, the Invisible Man finds, through laughter, that he is able to contain the electricity: "Ignoring the shock by laughing, as I brushed the coins off quickly, I discovered that I could contain the electricity – a contradiction, but it works." By containing electricity, the Invisible Man finds he can inhabit a contradiction that provides the means for self-defense. However, the boys are surrounded, and as he successfully contains the electricity, he is punished by onlookers hurling him onto the rug. Fred Moten and Stefano Harney identify the objective of Black Studies to be one of self-defense. They write, "our task is the self-defense of the surround in the face of repeated, targeted dispossessions through the settler's armed incursion." Moten and Harney's writing about the undercommons is an important constellation for this work and their ideas are woven throughout this chapter. The undercommons is particularly generative for my reading of *Invisible Man* – it also informs my thinking about electricity theft as a form of "self-defense," or a refusal of that which is offered (which is explored at length later). Their idea of the surround is also very apt in this moment of literary close reading as Invisible Man and his youthful compatriots are surrounded.

The electrified rug, perhaps a seemingly odd piece of technology, conjures the electric chair. Ellison also directly references the electric chair in another moment in the novel – the "Escape from the Hospital" scene – where White doctors forcibly administer electro-shock

³² Ellison, *Invisible Man*, 27.

³³ Harney, Stefano and Fred Moten. *The Undercommons: Fugitive Planning & Black Study* (New York: Minor Compositions, 2013), 17.

therapy on Invisible Man. In this later scene, he narrates, "I discovered now that my head was encircled by a piece of cold metal like the iron cap worn by the occupant of an electric chair."³⁴ New York, the setting of most of *Invisible Man*, was the first state to execute people via the electric chair. From 1900-1963 (the date of the last execution in the state) all death sentences were executed via electric chair. Furthermore, electrocution is still an alternative form of state execution in many Southern states (where the early "Battle Royal" scene and the Invisible Man's college years take place). Given the electric chairs' prominence as state-sanctioned violence during Ellison's writing of *Invisible Man*, the novel's setting, and the racially uneven infrastructural practices of the US, Ellison opens his novel with a radical imaginary: a Black man able to contain electrocution. The Invisible Man's containment of electricity imagines an embodied relationship between Blackness and electricity otherwise.

Invisible Man is not the only electrifiction that tries to imagine other formations of Blackness, electricity, and embodiment. Many twentieth and twenty-first century comic book superheroes, such as Storm, Black Lightning, Static Shock, and Volt, to name a few, also reimagine the relationship between Blackness and electricity. Much like Marvel's character Luke Cage – a Black man with unbreakable skin, rendering him bullet proof – the creators of these comic superheroes attempt to rethink the relationship between Black people and racialized violence through the creation of superpowered resistance. As Charles Pulliam-Moore notes in "Why *Do* so Many Black Superheroes have Electricity Powers?," all of these characters' original creators were White – placing their electrified super-Blackness firmly within a White imaginary. Chamara Moore observes that all of the Black electricity powered superheroes have a plot line where they lose control of their electricity, often harming

³⁴ Ellison, *Invisible Man*, 227.

themselves in an effort to contain their out-of-control-powers. Moore notes that this does not happen to non-Black electrified superheroes like Marvel's fictional Asgardian Thunder God Thor. Bringing Saidiya Hartman to bear on their reading of electrified Black superheroes, Moore critiques the comics for relying on suffering in order to make Blackness legible. Moore asserts that the White comics imaginary makes it impossible to imagine Blackness without suffering. It is important to note here that the same is true for Luke Cage—his bulletproof body, instead of creating the possibility for an experience of Blackness liberated from antiblack violence, provides the staging for scenes of fantastic and escalating violence that test his superpowered resistance.

Superhero comics' reliance on suffering to make Blackness legible, coupled with their loss-of-control story lines, reduces electrified super-Blackness to a struggle for bodily autonomy. These representations of super-Blackness link the lack of autonomy, Blackness, and electricity through a merging of the body/flesh with electricity, reducing their heroes to (faulty) electricity conductors. Read alongside Ellison's electrified rug – a technology imposed upon Invisible Man and his companions that materially enforces White supremacist power structures – the electrified comics superheroes showcase the importance of Invisible Man's subsequent electrical "sabotage" that imagines electricity otherwise. Invisible Man's

³⁵ Moore, Chamara. 2020. "Electrifying Blackness: Race, Phenomenology, and Black Superheroes." Paper presented at the conference "Drawing Diversity: Identity, Organizing, and Imagining in Comics and Graphic Narratives," UCSB, Santa Barbara, CA, January 24, 2020.

³⁶ Moore, "Electrifying Blackness."

Hartman, Saidiya V. Scenes of Subjection: Terror, Slavery, and Self-Making in Nineteenth-Century America. Oxford: Oxford University Press, 1997.

³⁷ Moore, "Electrifying Blackness."

³⁸ Moore, "Electrifying Blackness."

investment in conduction through technological praxis provides an alternative relationship between Blackness and electricity that does not rely on the Black body to contain the current.

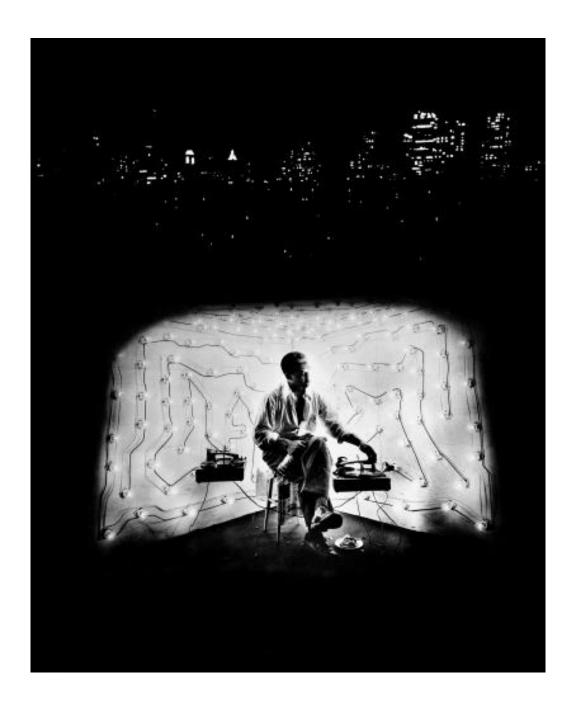




Figure 1 and 2. Gordon Parks. "Invisible Man Retreat" and Untitled from Parks 1952 collaboration with Ellison based on Invisible Man. Harlem, New York, 1952. The photographs are reproduced with permission of The Gordon Parks Foundation.

SIPHONING AS SABOTAGE

Invisible Man, and Gordon Parks's images inspired by it, provide a Black electrified imaginary that enunciate electricity theft as a form of technological praxis. What makes Parks's images of *Invisible Man* different from the comics' visualizations of Blackness and electricity is their emphasis on the act of theft. In Parks's images, electricity is not merged with the body or flesh, but instead is intentionally taken and used through technological know-how to remake (infra)structures of power and reimagine their worldmaking possibilities. In the first image by Parks, Harlem's skyline is formed by a constellation of lights floating in the darkness above

Invisible Man's isolation, and the alternative infrastructural relationships that make his subterranean refuge possible. Parks's images give figure and form to the ways that, as Katherine McKittrick and Clyde Woods have written about Black geographies, "these sites [Black geographies], and those that inhabit them, can ... allow us to consider alternative ways of imagining the world." The photos' chiaroscuro texture illustrates the illumination described in the novel's prologue and adds depth to the images through contrast, staging webs of infrastructural relationships and expressing the multifaceted ways that Invisible Man's electricity siphoning conducts. Parks's photographs illustrate the complicated relationships between Blackness and Whiteness, illumination and darkness, hypervisibility and invisibility central to Ellison's novel. Ultimately, like the novel, Parks's photo series specifically erodes associations of Whiteness with illumination and Blackness with darkness, firmly linking Blackness and illumination through illicit conduction.

Conduction refers to the process by which electricity is directly transmitted through a substance; the process by which sound waves travel through a medium; and the transmission of impulses along nerves.⁴⁰ Electricity theft, as it is represented in *Invisible Man's* literary imaginary, is about increasing one's conductivity. Conductivity helps metaphorize and describe Invisible Man's theft because the theft of electricity is different from the theft or illicit reproduction of discrete objects – it is an intervention into, and a redirection of, the circulatory

³⁹ McKittrick, Katherine and Clyde Woods. *Black Geographies and the Politics of Place* (Toronto: Between the Lines, 2007). 5.

⁴⁰ Oxford English Dictionary.

aims of infrastructure. 41 Invisible Man's siphoning is about facilitating flows across boundaries of containment and exclusion in order to reconfigure the cultural lifeworlds made possible by electricity. As Coleman and DeFrantz observe "the changes wrought by technologies ... are rendered 'universal' only to inevitably need to be rendered black at some point."42 The Invisible Man's conduction tells an electrifiction that counters narratives of uncomplicated electrical progress. His conduction highlights how Black cultural production and technological praxis are White-washed out of cultural imaginaries of modernity, while simultaneously crafting spaces and aesthetics only made possible by Black technological relationships. Invisible Man not only steals electricity, but also intentionally uses "a hell of a lot of free current."43 He explains, "In my hole in the basement there are exactly 1,369 lights. I've wired the entire ceiling, every inch of it. And not with fluorescent bulbs, but with the older, moreexpensive-to-operate kind, the filament type. An act of sabotage, you know."44 The concept of conduction weaves together *Invisible Man*'s technological and aesthetic influences, connecting the novel's commitments to radio and jazz with its representations of electricity, technological networks, and infrastructure systems.

Invisible Man's conduction of electricity, in turn, facilitates the conduction of musical waves and neurons. He confides, "Now I have one radio-phonography; I plan to have five. There is a certain acoustical deadness in my hole, and when I have music I want to *feel* its

⁴¹ Larkin notes that infrastructure has "its conceptual roots in the Enlightenment idea of a world in movement and open to change where free circulation of goods, ideas, and people created the possibility of progress ... of shaping modern society and realizing the future" ("The Politics and Poetics of Infrastructure," 328).

⁴² Coleman and DeFrantz, "Reach, Robot," 54.

⁴³ Ellison, *Invisible Man*, 5.

⁴⁴ Ellison, *Invisible Man*, 7.

vibration, not only with my ear but with my whole body. I'd like to hear five recordings of Louis Armstrong playing and singing "What did I Do to Be so Black and Blue" – all at the same time." Creative practice links Invisible Man's physical experience and technology. This is seen in his use of siphoned electricity to light 1,369 bulbs in a desire to illuminate "the blackness of my invisibility – and vice versa" and his desire to "feel [music's] vibration" with his "whole body." Black technological praxis, like Invisible Man's siphoning, foregrounds the importance of illumination, sonic vibrations, and extension, and the ways technology can facilitate conduction despite "acoustical deadness." Siphoning from Monopolated Power & Light, Invisible Man disrupts uneven infrastructural flows, and reconducts, extending them haptically and sonically.

Coleman and DeFrantz use conduction to reference jazz ensemble and improvisation, formulating conduction as "relationship/response," "sonic possibility as a social relation," and the process of change from one state to another. While Invisible Man is not conducting as part of a group of human musicians, Black sonic utterances, including jazz, blues, and radio, shape the novel's form and content. Powered by stolen current, Armstrong's "What did I Do to Be so Black and Blue" creates an "underworld of sound" that Invisible Man descends into, enabling the song to structurally shape the prologue's improvisational and nonlinear structure. As Ford has written, Invisible Man's electrical technologies not only record, carry, and amplify blues, jazz and radio, they also conduct these sonic forms, creating new networks

⁴⁵ Ellison, *Invisible Man*, 8-9.

⁴⁶ Ellison, *Invisible Man*, 8.

⁴⁷ Coleman and DeFrantz, "Reach, Robot," 54.

⁴⁸ Ellison, *Invisible Man*, 12.

and forms of extension.⁴⁹ As Ford points out, Invisible Man goes beyond being an innovative electrical engineer when he refers to broadcasting his own voice on the "lower frequencies" in the novel's conclusion.⁵⁰ The closing line of the novel – "Who knows but that, on the lower frequencies, I speak for you?" – evokes a radio broadcast and suggests that the novel itself is a form of current or conduction transmitting Invisible Man's voice to its readers.⁵¹

In his narration about his embodied technological practice, Invisible Man places himself "in the great American tradition of tinkers. That makes me kind to Ford, Edison and Franklin. Call me, since I have a theory and a concept, a 'thinker-tinker.'"52 Here Invisible Man refers to electricity's mythical early mediations – Benjamin Franklin's germinal kite and key – and the inventor of electric lighting, Thomas Edison. In so doing, he places himself in a familiar American trajectory – an innovative electrified genealogy – wherein the origin story and influence of his electricity siphoning are aligned with electricity's early mediators. By placing himself within this electrified genealogy Invisible Man unequivocally articulates electricity theft's reconfigurations of the US power grid as being as technologically innovative as electricity's earliest infrastructures and mediations (which still configure US electrification). Although *Invisible Man* is often considered a pessimistic novel, Invisible Man's creative use of technology (his role as a great American "thinker-tinker") is, as Lieberman describes, "proto-afro-futurist," in that it imagines technology otherwise through praxis.⁵³ Coleman and

⁴⁹ Ford, "Crossroads and Cross Currents," 895-896.

⁵⁰ Ford, "Crossroads and Cross Currents," 896.

⁵¹ Ellison, *Invisible Man*, 568.

⁵² Ellison, *Invisible Man*, 7.

⁵³ Lieberman, *Power Lines*, 188.

DeFrantz articulate a definition of Afrofuturism that is helpful here because it too ties creativity, technology, and physical experience. They note that Afrofuturism is often theorized through creative practice, what they describe as "making-with-technology," in such a way that links physical experience and technology. Reading about Invisible Man's inefficient use for his stolen electricity during a time of accelerating climate change may make one question the energy-drain of Invisible Man's electricity theft. Importantly, though, his illicit redirection of current away from private profit draws attention to human systems of power and difference and the ways they impact exclusion and inclusion within global networks of energy and extraction. Invisible Man's siphoning also raises questions about the efficacy of individual actions versus systemic solutions to extraction and climate change, and sparks the possibilities of maroon infrastructures and community energy self-determination.

Invisible Man's sabotage – his illicit, calculated redirection of electrical power – is possible because of his invisibility and subterranean fugitivity. The novel's emphasis on temporary refuge, fugitive freedom, and the subterranean evokes Harney and Moten's concept of the undercommons, ⁵⁵ To inhabit the undercommons, they write, "is to inhabit the ruptural," the "life stolen by enlightenment and stolen back, where the commons give refuge, where the refuge gives common." Going underground provides Invisible Man a temporary kind of

⁵⁴ Coleman and DeFrantz, "Reach, Robot," 56.

⁵⁵ Harney and Moten, *The Undercommons*, 26.

⁵⁶ Harney and Moten, *The Undercommons*, 28.

freedom, a place from which to reach out to find connection.⁵⁷ His hole is a "dislocation"⁵⁸ from which he is able to create a kind of undercommons through siphoning that allows him to refuse that which has been refused to him.⁵⁹

While Invisible Man's illicit tapping into Monopolated Light and Power's lines reimagines energy and infrastructural relationships, it is also an individual act of piracy. 60 Ellison's representation of electricity theft as powering individual hibernation, is, as I interpret it, shaped by US relationships to electricity as a commodity instead of electricity as a human right or public work. While *Invisible Man* remains focused on the individual at the expense of community, the questions the novel brings to the fore about the relationships between Blackness, electricity, commodification, labor, and energy, are important. Invisible Man's uses for the stolen electricity help him facilitate relations with Black cultural production, and ultimately, the larger technological and cultural networks of the outside world, though he

⁵⁷ Conduction and the connections it extends firmly link Invisible Man's siphoning from his hole with the undercommons, which are, Harney and Moten write, "mostly about reaching out to find connection" (*The Undercommons*, 5).

⁵⁸ Shukaitis, Stevphen. "Studying through the Undercommons: Stefano Harney & Fred Moten – Interviewed by Stevphen Shukaitis." *Class War University, November 12, 2012*. https://classwaru.org/2012/11/12/studying-through-the-undercommons-stefano-harney-fred-moten-interviewed-by-stevphen-shukaitis/.

⁵⁹ Its introduction poetically frames *The Undercommons* by stating, "we begin with the right to refuse ... the choices as offered (Harney and Moten, 8).

⁶⁰ *Invisible Man's* representation of electricity theft aligns with my understanding of Ravi Sundaram's theorizing about, what he calls, "pirate modernity." Sundaram writes that "piracy is not an alterity, or form of resistance, though it clearly offers creative solutions outside the property regime to subaltern populations."

Sundaram, Ravi. *Pirate Modernity: Delhi's Media Urbanism* (New York: Routledge, 2010), 13.

ultimately remains in hibernation for the duration of the novel. In other words, *Invisible Man* does not provide a map for movement building or community organizing and transformation. Individualism and isolation permeate the novel – the individual struggle between Battle Royal competitors could be read as a literary allegory for the difficulties (impossibilities?) of community building under systems of White supremacy and racial capitalism. The electricity siphoners interviewed in the WXYZ-TV Detroit news segment, however, do act as illicit community electricity brokers. They are part of larger community and kin networks. Their acts of theft refuse the exclusion of their communities and institutions in a move that facilitates alternative community formation.⁶¹

ILLICIT COMMUNITY ELECTRICITY BROKERS

WXYZ-TV Detroit's reporter Bill Spencer interviews one White man and two Black men in "Electricity thieves stealing power in Detroit," and while not explicitly addressing race, antiblackness informs the news feature's framing and Spencer's commentary. The interviews begin with Brian Brooks, a White twenty-nine-year-old. The newscaster justifies Brooks's energy siphoning by stating that for him, despite the risks, "it's all about the money." Brooks's illegality is problematic, but his illicit acts are presented as financially driven, and

⁶¹ Electricity theft powers alternative community formations in Detroit – and across the globe, such as the organizing and advocacy of the Soweto Electricity Crisis Committee, who regularly reconnect members of their community as part of a larger campaign demanding access to power as a human right.

Egan, Anthony and Alex Wafer. "The Soweto Electricity Crisis Committee." *Globalisation, Marginalisation & New Social Movements in Post-Apartheid South Africa*, 2004.

⁶² WZYX-TV Detroit: Channel 7. "Electricity thieves stealing power in Detroit." November 4, 2010. https://www.youtube.com/watch?v=V-4cSLH1DEA&t=221s.

thus, on some level understandable and relatable. However, when Spencer begins his interview with Kenneth Walls, a middle-aged Black man, he sets a different tone by introducing Walls through video footage of him from a hidden camera. Walls is unaware he is being filmed, which brings up questions of consent and surveillance. Additionally, instead of the residential homes Brooks's discusses hooking up, the video footage shows Walls hooking up a strip club, framing Walls as morally transgressive. WXYZ-TV Detroit's surveilling treatment of Walls is a form of "racializing surveillance," a term employed by Simone Browne that indicates "when enactments of surveillance reify boundaries along racial lines, thereby reifying race ... where the outcome of this is often discriminatory and violent treatment." As the segment progresses, Spencer is quick to update viewers that Walls faces up to five years in jail for being caught hooking someone up to the grid by another hidden camera.

In the introduction to the WXYZ-TV Detroit news clip a voiceover narrator (who viewers eventually recognize as Michael Lynch, Chief Security Officer for DTE Energy) enthusiastically interjects: "we call them illegal hookup men!"⁶⁵ "Hookup" is a double entendre. The first definition of "hookup" neatly fits with WXYZ-TV Detroit's use: "a connection to a public electric, water, or sewer line, or to a similar service; an interconnection of broadcasting equipment for special transmissions."⁶⁶ This use of the word firmly connects that act of "hooking up" to infrastructure and media broadcasting. "Hookup" was first used in

⁶³ Browne, Simone. *Dark Matters: On the Surveillance of Blackness* (Durham: Duke University Press, 2015), 8.

⁶⁴ WZYX-TV Detroit: Channel 7, "Electricity thieves stealing power in Detroit."

⁶⁵ WZYX-TV Detroit: Channel 7, "Electricity thieves stealing power in Detroit."

⁶⁶ New Oxford American Dictionary.

1903,⁶⁷ demonstrating how its usage history mirrors the acceleration of Western industrialism, firmly linking infrastructural utility services with projects of developmental modernity. The second and informal definition of hookup is "a romantic or sexual relationship, *esp.* a casual sexual encounter." Electricity infrastructure access, the possibilities it materializes, and its relationship to authoritative power directly influence and determine sexual lexicons and imaginaries.⁶⁹

The double entendre of "hookup" is noted in the clip's comments. YouTube account-user Davide Woodside asks, "Can the 'Hook-Up Guy' hook up girls?" Woodside's comment plays with the multiple meanings of the word "hookup," drawing viewer's attention to the gendering of "Hook-Up Guy." Woodside responds to the news segment's use of the infrastructurally inflected "hookup" by calling attention to the word's informal meaning. In so doing, he collapses the "Hook-Up Guy's" electricity siphoning with human encounters (presumably sexual) — the grid is exchanged with "girls." That the informal casual sex definition of "hookup" directly stems from an act of infrastructural connection begs a reading of the WXYZ-TV news clip that pays special attention to the intersections of sexualization and race and to an exploration of the ways "being open" (to connection, communication, cooperation, or sex) is represented.

While Woodside may have been making a joke, the comment references US histories of predatory sexualization and its intersections with antiblack racism. Intersecting with the subtextual sexuality of referring to electricity thieves as "hookup men" is the explicit

⁶⁷ Oxford English Dictionary.

⁶⁸ Oxford English Dictionary.

⁶⁹ "Sparks flew," "charged encounters," and "turned on" are all additional examples of electricity shaping how people talk about sexual pleasure, desire, attraction, and connection.

racialization of the two Black hookup men interviewed by WXYZ-TV. Spencer and WXYZ-TV's racist criminalization of Walls implicitly draws on a long history of portraying Black men as sexually threatening, and is hinged on casting Black electricity thieves as predators ready to penetrate the vulnerable grid. In WXYZ-TV's interviews, Spencer's White supremacist undermining of urban Black folks harmfully caricatures them in order to justify their systemic exclusion.⁷⁰

Whether hookup refers to either a legal/formal or illegal/informal connection to a public service, the act of connecting, of "hooking up," relies on an opening in something otherwise conceived of as enclosed. Spencer's narration highlights this when he refers to illicit connections to the grid as "wide open" and "unprotected." The relationship between enclosure and the threat of the leak as a dialectical one – circulation (including infrastructural) is dependent on control and efforts of enclosure always engender leakiness. 72

When one siphons electricity, cable insulation is cut away and the conductive wire exposed. An illicit piece of metal, usually another cable, is attached to circumvent surveilling utility meters and divert some of the electrical current from the mainline. Despite DTE's attempts to surveille Detroit's grid – Spencer spends time during the news broadcast encouraging DTE to install even more hidden cameras (like the one he used to film Walls) to help surveil, catch, and incarcerate more energy siphoners – it remains porous: inherently

⁷⁰ Pulido further explicates the relationship between environmental white supremacy and racial caricaturing in "Geographies of race and ethnicity I: White supremacy vs white privilege in environmental racism research."

Pulido, Laura. "Geographies of race and ethnicity I: White supremacy vs white privilege in environmental racism research." *Progress in Human Geography* 39.6 (2015): 809-817.

⁷¹ WZYX-TV Detroit: Channel 7, "Electricity thieves stealing power in Detroit."

⁷² Chun and Friedland, "Habits of Leaking: Of Sluts and Network Cards."

vulnerable to illicit, covert redirection. Given that surveillance "is the fact of antiblackness," 73 DTE and WXYZ-TV Detroit justify their antiblackness in the name of saving money, keeping their (White) customers "safe," and maintaining the grid's infrastructural containment and control.

Akin to the material devaluation of the Invisible Man's "Battle Royal" competitors, nowhere is there a discussion of how Walls is compensated for his skills, as there was for Brooks. Walls's claims that he is an electrical expert are scoffed at by Spencer – "That's right ... he considers himself an expert."⁷⁴ Spencer disregards the opportunity to encourage DTE to hire Walls based on his electrical expertise and fearlessness, as some of the YouTube comments on the segment suggest, instead spending the bulk of Walls's interview positioning him within a cycle of poverty and criminality:

Spencer: He says he's been doing this since he was ten years old and you won't believe who taught him the trade!

Walls: At that time it was Edison, and they turned the power and gas off in the winter time, and my mother told me to go out there and take the locks off, I was very handy, and she showed me how to turn it on.

Spencer: That's right, his own mother taught him and he considers himself an expert.⁷⁵

Spencer's commentary reads as if it were lifted directly from Daniel Patrick Moynihan's 1965 report "The Negro Family: The Case For National Action." As Hortense Spiller's critique of

⁷⁴ WZYX-TV Detroit: Channel 7, "Electricity thieves stealing power in Detroit."

⁷³ Browne. *Dark Matters*. 10.

⁷⁵ WZYX-TV Detroit: Channel 7, "Electricity thieves stealing power in Detroit."

the report shows, it blames systemic racism and poverty on African American mothers and erases Blackness – two moves Spencer also makes in his reporting. The Moynihan Report states, "In essence, the Negro community has been forced into a matriarchal structure, which, because it is so far out of line with the rest of American society, seriously retards the progress of the group as a whole, and imposes a crushing burden on the Negro male." Spencer's reporting mirrors The Moynihan Report in that both name Black women as responsible for poverty and dysfunction, perpetuating racist myths about poverty and criminality. Walls's childhood winter utility disconnection is justified by his mother's illegal actions and his inheritance of her criminality, while the conditions of his childhood poverty are disregarded, and his technical skills devalued. Spencer insinuates that Walls's turn to crime was inevitable and that any informal (mother-sourced) technical skills he has are illegitimate. In short, the segment's racist ideology works to rationalize Walls's economic circumstances and demean the stakes of his survival.

Throughout the interview, Spencer's reporting fails to address the geographic, structural, or historical context for Walls's economic situation. Spencer's reporting does not acknowledge that new legislation was passed the year before WXYZ-TV Detroit's segment, and effective mere months before Spencer's reporting on electricity theft, that makes it illegal

⁷⁶ Moynihan, qtd in Spillers, Hortense J. "Mama's Baby, Papa's Maybe: An American Grammar Book." *Diacritics* 17.2 (1987): 65.

⁷⁷ Spencer doubles down on his racist caricature of Black Detroiters in his interview with the third "hookup man," James Lee Anderson. Anderson is introduced as a "convicted Felon with a violent past" (WZYX-TV Detroit: Channel 7, "Electricity thieves stealing power in Detroit."), thus tainting his interview with associations of illegality, danger, and recidivism. WXYZ-TV dismisses Anderson by editing the film to cut away from him – thus interrupting his interview – to dramatic footage of police arresting someone who remains anonymous to the viewers, but who one can infer is supposed to stand in for the kind of threat Anderson supposedly poses.

in Michigan to cut off access to gas and electric utility access from November 1 - March 31, due to dangerously cold winter temperatures.⁷⁸ This legislation protects senior citizen and active military customers from all shut offs, while also providing the opportunity for all citizens to enter into a "winter protection plan," regardless of nonpayment or delinquent accounts.⁷⁹ Spencer does not take this opportunity to update viewers on the history of this legislation, or to inform his viewers of important low-income energy assistance programs.

Importantly, Spencer tells his electrification from the utility perspective. DTE Energy provides Detroit with electricity and is a private investor-owned utility (IOU), which means, despite being regulated by public state commissions, it exists to make a profit. In contemporary IOUs like DTE Energy, the histories of US electrification by private utilities and electricity as a commodity live on to continue to shape contemporary electrification. WXYZ-TV Detroit plays up the rights of ownership (privately owned utilities, instead of utilities as a commons or public work, are what make the "theft" of electricity possible in the first place). Electricity siphoning does create revenue loss for utilities, and can cause rolling blackouts and brownouts⁸⁰ due to the consumption of more energy than is available on the grid, but WXYZ-TV's reporting manipulatively occludes the perspectives of individuals and communities

⁷⁸ Michigan Legislature. "Michigan Public Service Commission (Excerpt) Act 3 of 1939:

^{460.9}r Shut off of service by municipally owned electric utility; prohibitions; requirements; Definitions."

http://www.legislature.mi.gov/(S(tpo3nc3dtkwgcedezph1zl2b))/mileg.aspx?page=getObject &objectName=mcl-460-9r.

⁷⁹ The Low Income Home Energy Assistance Program, "State Disconnection Policies." https://liheapch.acf.hhs.gov/Disconnect.htm#mi.

⁸⁰ A brownout is an intentional or unintentional decrease in voltage. When intentional, brownouts are used by utilities to minimize system load and avoid a total blackout. The term brownout refers to the way incandescent lights dim when they draw less voltage from the grid.

denied access to the material, cultural, and social networks made possible by access to electricity. The news reports' focus on the threats to private profit that energy siphoning poses works to doubly exclude these households – they are both materially excluded by their lack of access to electricity and invisibilized by the mainstream electrification about energy siphoning.

This news feature's electrification ignores the more complex story of Detroit's history of environmental racism and the structural conditions that have contributed to siphoning. At no point does Spencer acknowledge that in the same year that DTE shut down access to electricity in thousands of homes in Detroit and oversaw the arrest of more than 120 energy siphoners, ⁸¹ they maintained operation of Detroit's River Rouge coal-fired power plant (which has since been decommissioned), "the seventh-worst EJ [environmental justice] Offender in the country" and "earned \$4.99 billion in operating revenues from their electric utility operations." The history of coal mining in the US is also one wrapped up in White supremacist systems of forced labor – the convict leasing system forced Black men to be some of the country's first coal miners in the 19th century. ⁸³ While some of Ellison's contemporaries conceived of electricity as a transition to a world of "beauty" and "lightness" after the coal-powered industrial era, ⁸⁴ this is yet another electrifiction – as the now dead River Rouge Power Plant memorializes, the US electricity grid was (and still is) fueled by the burning of coal.

WXYZ-TV Detroit elides race as a category that matters throughout their reporting, and thus erase the relationship between electricity and race (a relationship that *Invisible Man*

⁸¹ WZYX-TV Detroit: Channel 7, "Electricity thieves stealing power in Detroit."

⁸² Wilson, Adrian. "Coal Blooded: Putting Profits Before People" (2016), 41.

⁸³ Pellow, David Naguib. *What is Critical Environmental Justice?* (Cambridge: Polity Press, 2018), 88.

⁸⁴ Lieberman, Power Lines, 179.

puts front and center). Detroit, Michigan is a predominately Black city. ⁸⁵ Like Invisible Man's Harlem, Detroit is a Black cultural epicenter and a geographic location shaped by the history of the Great Migration from the US South to the North (which is mirrored in the novel by Invisible Man's move North to New York). Today, Detroit is one of the poorest cities in the US. ⁸⁶ "Given that ... physical geographies are bound up in, rather than simply a backdrop to, social and environmental processes," as McKittrick and Woods contend, "it follows that the materiality of the environment is racialized by contemporary demographic patterns as shaped by historic precedents." ⁸⁷ The increased isolation, segregation, and marginalization that came hand-in-hand with poverty during the decades after WWII in Detroit was unprecedented. ⁸⁸ By 1980, about half of Detroit's adult male population only had tenuous connections to the formal labor market. ⁸⁹ Absent from the WXYZ-TV's reporting was the city's postwar history of deindustrialization, White flight, persistent discrimination in regard to housing and access to the workforce. ⁹⁰ This was intensified by Michigan's post-2008 attempts to wrestle infrastructural control away from already marginalized urban Detroiters. ⁹¹ Brian Whitener

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⁸⁵ With around 80% of its population self-identifying as African American, Detroit has the largest percentage of Black residents of any city (greater than 100,000 people) in the US.

⁸⁶ Detroit is one of the top five most impoverished cities (greater than 100,000 people) in the US.

⁸⁷ McKittrick and Woods, Black Geographies, 3.

⁸⁸ Sugrue, Thomas. *The Origins of the Urban Crisis: Race and Inequality in Postwar Detroit* (Princeton: Princeton University Press, 1996), 262.

⁸⁹ Sugrue, The Origins of the Urban Crisis, 270.

⁹⁰ Sugrue, The Origins of the Urban Crisis, 270.

⁹¹ Sugrue outlines that the roots of Detroit's urban predicament go back earlier than most social scientists acknowledge to the postwar era – the same decades that Ellison was writing *Invisible Man* and collaborating with Gordon Parks on their "Harlem is Nowhere" and Invisible Man photography series.

outlines how, in the Detroit context, "systems of circulation have been newly politicized and how social-reproductive infrastructure, as a means for the circulation of resources, has become an object of political contestation, a form of coercive racial and class control, and also productive of race and class itself." Whitener emphasizes the ways that race becomes reproduced through differential access to resources by highlighting the racial line between who profits from infrastructural revenue and who is denied access in Detroit and its surrounding White suburbs. In this context in which environmental racism shapes the electrical infrastructure of Detroit, 93 siphoning electricity is an act of agency that refuses the organizing exclusion and expendability of racial capitalism.

My intent here is to frame electricity siphoning as an environmental justice issue so as to create a necessary bridge between its representation and a broader analysis of the infrastructure that enforces racial capitalism's uneven exposure to pollution and access to resources. Environmental justice frameworks emphasize the intersections of identity, power, environment, and resistance – a landmark example being the 1987 United Church of Christ "Toxic Wastes and Race in the United States" study. Such an approach insists that BIPOC

⁹² Whitener, "Detroit's Water Wars," 3.

⁹³ Though the specifics of the case of Detroit are particular to its "history of race, residence, and work" (Sugrue, *The Origins of the Urban Crisis*, 5), both Whitener and Sugrue note in their works that what happened in Detroit is familiar to many post-industrial cities in the US, and can help "bring out how, across the urban United States, the social-reproductive means of communities of color and immigrants are subject to conditions of intense attack through the existing social infrastructure" (Whitener, "Detroit's Water Wars," 4).

⁹⁴ The "Toxic Wastes and Race Study" was born from protests of hazardous waste landfills in Warren County, NC (often credited with launching the US environmental justice movement), and the subsequent Government Accountability Office (GAO) study which found that African Americans were disproportionately and predominately impacted by the Warren County landfills.

experiences are central to understanding how US infrastructural projects are experienced, represented, imagined, and located. Electricity theft both contributes to and complicates environmental justice discourse, as it straddles early approaches and movements that appeal to the state for distributive solutions⁹⁵ and more contemporary theorizing that reveal the state as complicit in environmental degradation and White supremacy.⁹⁶ While an (illicit) act of redistribution, electricity siphoning does not slide into sanitized bids for inclusivity through appeals to the capitalist (neo)liberal nation state. Instead, electricity siphoners negotiate what Steven Jackson terms "broken world thinking." Rather than an imaginary "world of progress

Mohai, Paul, David Pellow, and J. Timmons Roberts. "Environmental Justice." *The Annual Review of Environment and Resources* 34 (2009): 406.

The "Toxic Wastes and Race Study" was commissioned and sponsored by the United Church of Christ, and identified that the placement of hazardous waste and landfills near communities of color was a national pattern.

United Church of Christ. "Toxic Wastes and Race in The United States" (1987), xiii.

It was the first national-level study of racial and socioeconomic characteristics of communities located near hazardous waste and landfill sites (United Church of Christ, "Toxic Wastes and Race," ix). It found that the percentage of people of color in zip codes containing at least one waste facility were double that containing none, and in zip codes with two or more facilities, the percentage of people of color were triple. It also found that the percentage of people of color in the zip code proved to be the most accurate predictor of where waste facilities were located (United Church of Christ, "Toxic Wastes and Race," xv).

⁹⁵ For example, the "Toxic Wastes and Race Study" ends with a "Major Conclusions and Recommendations" section, which lists solutions such as "the formation of an office of Hazardous Wastes and Racial and Ethnic Affairs by the US Environmental Protection Agency," and urges voter registration and turnout (United Church of Christ, xv-xvi).

⁹⁶ Laura Pulido and David Pellow's work encapsulate this more recent wave of environmental justice scholarship that is critical of the state. While holding the state accountable for its sanctioned violence, their work advocates for community-based solutions. Furthermore, they critique distributive solutions, arguing that what is necessary is not more evenly distributed exposure to toxins, but a reduction/eradication of systems of pollution.

⁹⁷ Jackson, Steven J. "Rethinking Repair." *Media technologies: Essays on communication, materiality, and society*, edited by Tarleton Gillespie, Pablo J. Boczkowski, and Kristen A. Foot (Cambridge: MIT Press, 2014), 221.

and advance, novelty and invention, open frontiers and endless development," Jackson advocates for a shift to thinking about a "world of risk and uncertainty, growth and decay, and fragmentation" – what he calls "broken world thinking." Given the uneven access and impact of US electrified modernity, siphoning becomes an ongoing activity "by which stability (such as it is) is maintained," and electricity theft becomes the "subtle arts of repair by which rich and robust lives are sustained against the weight of centrifugal odds." 99

Countering electrifictions that tell an uncomplicated story of progress and advance, Ellison's representation of electricity theft anticipates and delegitimizes the perspective of WXYZ-TV's news segment. One could read the novel's unnamed narrator as a version of Walls, told otherwise. While my analysis of the news report's electrifiction largely works to flip Spencer's narration about Walls by focusing on its missing historical and structural context, this is not the only alternative electrifiction this chapter offers – Ellison's narration, about the aesthetic and cultural possibilities of reconducting electrically powered (infra)structural flows, is another.

CONCLUSION

Jackson's "broken world thinking" not only requires the acknowledgement of the very real shortcomings of infrastructural systems, but it also appreciates that there is hope in the radical and fringe reconfiguring of infrastructural worlds. *The Undercommons* offers an important counter to Jackson's emphasis on repair, however, by questioning the efficacy of repairing a world that never worked for (most) folks in the first place. Harney and Moten state,

98 Jackson, "Rethinking Repair," 221.

99 Jackson, "Rethinking Repair," 222.

"I also know that what it is that is supposed to be repaired is irreparable. It can't be repaired. The only thing we can do is tear this shit down completely and build something new.' The undercommons do not come to pay their debts, to repair what has been broken, to fix what has come undone." Electricity siphoning, as I conceive of it and as this archive models is a form of retributive refusal, not repair.

Electricity siphoning has the potential to bring down the whole system, if only temporarily. When more power is drawn from the grid than is present on the lines, rolling brownouts and blackouts occur. Industrial Enlightenment values epitomize a fear of going backwards, of darkness, of regression as opposed to teleological developmental progress. Invisible Man's observations reveal that darkness is not the same thing as Blackness – that Blackness is more closely connected to illumination: "I've illuminated the blackness of my invisibility – and vice versa". The Blackness of Blackouts has the potential to disrupt the electrified system of enlightenment. The Blackness of Black(outs) makes "common cause with the brokenness of being, a brokenness, I would venture to say, that is also blackness, that remains blackness, and will, despite all, remain broken because this ... is not a prescription for repair." Invisible Man identifies his time underground as always only temporary, as always a preparation for escalated action – "Please, a definition: A hibernation is a covert preparation for a more overt action." Electricity theft, in its perpendicular-to-the-legal reconfiguration of infrastructural worlds and surveillance-refusing potential for Blackouts, is simultaneously

¹⁰⁰ Harney and Moten, *The Undercommons*, 5.

¹⁰¹ Ellison, *Invisible Man*, 13.

¹⁰² Harney and Moten, *The Undercommons*, 5.

¹⁰³ Ellison, *Invisible Man*. 13.

"covert preparation" and "more overt action." It cuts across disempowerment and dismissal. As *Invisible Man* demonstrates, electricity siphoning is a form of fugitive conduction, made possible by theft and technological praxis, that creates the possibility of an uncertain, illicit undercommons. Walls's energy siphoning in Detroit highlights the failures of US infrastructure systems, illuminating how they are contoured by environmental White supremacy and racial capitalism. These acts and imaginaries invoke the (c)overt potentiality of Blackouts, while emphasizing the ways that siphoning is a tactical act of redistribution that not only reconfigures particular infrastructural worlds, but also intervenes in the current relationship between energy systems and sociocultural power structures.

Short I

Electric Lady(land)

"(I want to show you) Good and evil lay side by side / While electric love penetrates the sky."

- The Jimi Hendrix Experience, "Electric Ladyland" (1968)

"I'll reprogram your mind, come on get in / My spaceship leaves at 10:00."

– Janelle Monáe, "Electric Lady" (2013)

In Ralph Ellison's *Invisible Man*, the unnamed protagonist siphons electricity in a move that increases his conductivity, despite "acoustical deadness," enabling his proto-Afrofuturist technological praxis. Invisible Man's electrical theft facilitates flows across boundaries of containment and exclusion, reconfiguring the cultural lifeworlds made possible by electricity.

This short sounds back to Invisible Man's literary conduction, and dwells in the connection between electricity and sonic possibility gestured to in the novel, imagining Jimi Hendrix's iconic music as an extension of Invisible Man's sonic conduction. Conduction refers to the process by which electricity is directly transmitted through a substance; the process by which sound waves travel through a medium; and the transmission of impulses along nerves.²

Reframing Hendrix's music as a form of conduction brings the role of electric current and Hendrix's use of electrified technologies to the fore of his musical practice. The sounds Hendrix's music is now known for cannot be replicated by an acoustic guitar and thus would not be possible without electric current. Now synonymous with 1960s psychedelia and rock and roll more generally, Hendrix's musical production required him to reimagine and

¹ Ellison, *Invisible Man*, 8.

² Oxford English Dictionary.

reconfigure the electric guitar and amplification technology. *Electric Ladyland*, The Jimi Hendrix Experience's third studio album, and the last created during Jimi Hendrix's lifetime, was Hendrix's only album to reach number one in the US and includes some of Hendrix's biggest hits, such as the extended electric blues jam of "Voodoo Chile" and Hendrix's electrified cover of Bob Dylan's "All Along the Watchtower." The sounds of Hendrix's guitar playing – the warm tone, enhanced upper dimensions, distortion, and reverb – are some of the most influential in electric guitar-driven rock and roll history. Songs like "Voodoo Chile" and "All Along the Watchtower" are a product of Hendrix's musical genius (sonic conduction), use of mind-altering psychedelic drugs (neural conduction), and of his electrified technological praxis (electrical conduction). His playing reconfigured and reimagined what the electric guitar could sound like, fully utilizing electrical music technology such as amps, guitar, and fuzz pedals to alter the conduction of the soundwaves he produced.

Hendrix's sonic conduction intentionally (mis)used electric guitar and amplification technology in order to push the limits of sonic possibility. Hendrix intentionally reconfigured and reworked the sonically possible to produce new and different sounds. For example, Hendrix is known for playing a right-handed guitar flipped upside down and restrung to be left-handed.³ He also rode his amps at full volume, turned all the way up, which increased distortion and enabled him to play with the resulting reverb.⁴ About ten and a half minutes into the *Electric Ladyyland* recording of "Voodoo Chile," high pitched electrical squeals interrupt the electrified blues of the song and listeners can hear voices in the background laughing and

³ Brewster, David. "Nailing It: Achieving the Tones of Jimi Hendrix," *Reverb*. December 30, 2015. https://reverb.com/news/nailing-it-achieving-the-tones-of-jimi-hendrix.

⁴ Brewster, "Nailing It: Achieving the Tones of Jimi Hendrix."

saying "turn that down, turn that down." This moment sounds Hendrix's electrified praxis, where his music draws attention to how electrification changes what is sonically possible. Instead of tapering off, the song picks back up and continues for another five minutes. Hendrix is said to have favored coiled cables, which have a higher capacitance. Sonically, this warmed his sound, electrically, the coiled cables had the potential to store more electricity, increasing his conduction. With his electrified and psychedelic sound, Hendrix brings the blues and voodoo into an electrified sonic (afro-)modernity.

Today, Hendrix's music signals rock and roll modernity. The sounds of his overamped, upside down, electric guitar shaped sonic modernity and what counts as modern music within the rock and roll genre. In *Phonographies: Grooves in Sonic Afro-Modernity* Alexander Weheliye observes that White technological innovations (like the World Wide Web) are considered central to cultural ideas about what constitutes "the techno-vanguard." Meanwhile, Black technologies, particularly sound technologies, "are not regarded as technological at all. Too often this bifurcation locates black cultural production beyond the pale of what counts as technological in contemporary critical discourse." Citing the "general hegemony of vision that permeates Western modernity" Weheliye points out how "academic considerations of technology ... remain deaf to the sonic topographies of popular music." Ultimately, Weheliye argues that "the technological and social histories of sound recording and reproduction ... provide a singular mode of (black) modernity ... Black culture's reciprocal engagement with

⁵ The Jimi Hendrix Experience. "Voodoo Chile." *Electric Ladyland*. Reprise. 1968: 10:45.

⁶ Brewster, "Nailing It: Achieving the Tones of Jimi Hendrix."

⁷ Weheliye, Alexander G. *Phonographies: Grooves in Sonic Afro-Modernity* (Durham: Duke University Press, 2005), 2.

⁸ Weheliye, *Phonographies*, 2.

sound technologies amplifies this formation's indicativeness of and centrality to modernity rather than affirming its status as a minor modernity or countermodernity." In the case of Hendrix, whom Weheliye describes as running "up against the boundaries of 'black music'" during his historical timeframe, electricity made it possible for him to reconfigure and reimagine how "star spangled" rock and roll modernity sounds.

Decades later, in homage to Hendrix's influential album, Janelle Monáe's third release (Monáe's second full album), *The Electric Lady*, uses the figure of the electric lady to draw and riff on Monae's android alter ego Cindi Mayweather, whom listeners meet in Monae's earlier works *Metropolis: The Chase Suite* and *The ArchAndroid*. While I am predominately interested in Monáe's use of electricity as part of their character creation and worldmaking across their body of work, I would be remiss not to point out that their rich digital archive is also only materially possible because of the digital and cyber mediascapes made possible by electrification and fueled by the power grid.

Being electrified, in Monáe's body of work, is used to signify the other-than-human – the android. In a complicated depiction of the future, Monáe utilizes the android as a symbol of objecthood. About Monáe's use of the figure of the android, or "electric lady," Uri McMillan writes that Monae "manipulates avatar production for the future." Elaborating, he explains

⁹ Weheliye, *Phonographies*, 3.

¹⁰ McMillan, Uri. *Embodied Avatars: Genealogies of Black Feminist Art and Performance* (New York: New York University Press, 2015), 222.

Here, again, the history of the word robot, and its entanglements with forced labor come to mind. The word "robot" encodes a connection between and among unfreedom, exploitation, and technology. To repeat as a way of underlining, Robot comes from 'Robota,' which is the Czech word for serf labor, drudgery, and hard work. It entered into English through a science fiction drama by Czech playwright Karel Capek in the 1920s (Kakoudaki, *Anatomy of a Robot*, 116).

that, "In the staging of Mayweather's imperiled bid for freedom, Monáe's performance suggests, performing objecthood is an ever-tenuous process that, even in its failures, dramatizes both conditions necessary for the emergence of black female subjectivity and the stultifying constrictions that threaten its extinguishment." McMillan concludes that artful Black feminist "performances of objecthood and avatar-play" are forms of "capacious worlding" in that "they hint at new possibilities for self-making in the African diaspora amid the imbroglio of history." 12

The android, or "electric lady," is used by Monáe as a potent avenue for exploring the experience of being othered and dehumanized based on race, gender, and sexuality. Despina Kakourdaki writes about how robot stories reveal the limits of legal and rights-based approaches to personhood:

Under the imaginative license of the science fiction mode ... we find echoes of historical processes of enslavement and emancipation, the loss and restoration of rights, and the modern philosophical tendency to prioritize legal definitions of personhood over an intuitive, embodied, or private sense of self. In their depictions of enslavement, robot stories reveal a commitment to address issues of cultural memory, to make provocative interventions to the historical record, or to revisit the traumatic impact of historical events.¹³

In some ways, Monáe's "electric lady" and Android avatar Cindi Mayweather are a retelling of General Electric's (GE's) electric slave advertising campaign told otherwise. Monáe's

¹³ Kakoudaki, *Anatomy of a Robot*, 115.

¹¹ McMillan, Embodied Avatars, 224.

¹² McMillan, *Embodied Avatars*, 21.

retelling is attentive to the history of US chattel slavery and its afterlives. This is, perhaps, most explicit in Monáe's "Many Moons" music video which prominently features an Android auction. This work distills the ways race, gender, and sexuality other and objectify. Kakoudaki observes that "Robot stories showcase the longevity of repressive structures and separatist or racist epistemologies and the authority of legal institutions, their ability to confer or ascertain different definitions of personhood." In other words, where GE constructs its electric slave electrifiction in order to promote a consciousness of electrical progress and make electricity a fundamental part of modernity, Monáe uses the figure of the electrified android to reveal the states of unfreedom that create and shape modernity.

Ultimately, Hendrix and Monáe in tandem embody an afrofuturist relationship to electrified technology. In their body of works, electrification provides a conduit for accessing modernity and imagining complex, nonlinear Black futures.

¹⁴ Kakoudaki, *Anatomy of a Robot*, 115.

"Reimagining California's Relationship to Fire: Wildfires, Leaked Sparks, and Cultural Burning"

"This land needed fire."

– Ron W. Goode, Honorable Chairman of the North Fork Mono Tribe, *Tending the Wild* (2016)

"California is a story. California is many stories."

– Deborah A. Miranda (Esselen and Chumash), *Bad Indians: A Tribal Memoir* (2013)



Figure 1. The Thomas Fire as it burns through Montecito, CA on December 17, 2017. It will take Firefighters more than a month to 100% contain the fire. Photograph by Mike

Eliason/Santa Barbara County Fire Department. The photograph is reproduced with permission of the photographer.

The photograph that opens this chapter, of the 2017 Thomas Fire as it swept through the wealthy enclave of Montecito just south of Santa Barbara, captures spectacular environmental violence. While there is no photograph of the electrical sparks and molten arcs that ignited the Thomas Fire, photographs like Mike Eliason's make clear the causal connection between California fires and electricity equipment – they tell a visual electrifiction about the relationship between electricity and fire. Looming electricity transmission towers dominate the photo's foreground, prefiguring the findings of the Thomas Fire's 2019 investigation: that this devastation was sparked by Southern California Edison's electricity equipment. The transmission towers loom; they stand out in stark relief against the glow red flames and wreath of gold smoke. The linear industrial forms of the electricity equipment foreground the infrastructure system, while the organic shapes of the flames, smoke, trees, and hills recede to the background. The transmission towers appear ominous, advancing toward the viewer and backed by flames that are as tall as they are. The powerlines connecting the towers – the fire-starting culprits – are obscured, disappearing into the blaze and smoky haze, making the towers appear discrete, camouflaging their interconnection.

There is also another element in the picture: wind. On the evening of December 4, 2017, the Thomas Fire caught north of Santa Paula, California. Started from two closely located, but separate ignition sites, the blaze grew rapidly in size, traveling fast. A record-long Santa Ana Winds event, with winds calculated to be blowing 35 meters per second, whipped the fire through unincorporated Ventura County, quickly approaching and burning a path

through the City of Ventura, with the flames then heading north toward Santa Barbara County.¹ Those of us north of the fire inhaled smoke and ash long before the fire reached us, the sky gray, the sun bright red – fluorescent. The Thomas Fire would go on to burn for over a month, leaving more than 440 square miles of land, over a thousand destroyed structures, two deaths, and billions of dollars of damage in its wake. Although it would briefly become the largest fire in the state's history, it is now eclipsed by several other megafires.²

Nearly two years after the Thomas Fire burned through Ventura and Santa Barbara Counties, an investigation, headed by the Ventura County Fire Department, concluded that the fire was "sparked" by Southern California Edison's power lines.³ The lines came into contact "phase to phase" during high winds, resulting in an arc that "deposited hot, burning or molten material onto the ground, in a receptive fuel bed, causing the fire." The investigation found that Southern California Edison's electrical equipment was responsible for both of the Thomas Fire ignition points. This is true of other fires: a recent PBS investigative report found that

¹Fovell, Robert G. and Alex Gallagher. "Winds and Gusts during the Thomas Fire." *Fire* 1.3 (2018): 47.

² The Thomas Fire was unseated less than a year later by the 2018 Camp Fire, which was also ignited by electricity equipment – sparks from a damaged PG&E electric pole and powerline started the blaze. This rapid unseat exemplifies the speed with which California's deadly and destructive fires are increasing, and the regularity by which sparks leak from California's electricity equipment.

³ California Department of Forestry and Fire Protection. *Investigation Report*. https://www.psblaw.com/wp-content/uploads/2019/03/Thomas-Fire-Investigation-Report_Redacted_3-14-19.pdf.

⁴ CapRadio. "Report: Power Lines Sparked Massive Southern California Fire." March 13, 2019. https://www.capradio.org/articles/2019/03/13/report-power-lines-sparked-massive-southern-california-fire/

approximately 40% of California's "worst blazes" were caused by electricity equipment. Electrical sparks are a systemic problem – the Thomas Fire is not a discrete incident.⁵

California's electricity sparked blazes are a fiery example of the environmental violence that results when energy infrastructure leak. California's leaked sparks connect the grid to other leaky energy infrastructure, such as oil pipelines and nuclear power stations. As Sisseton-Wahpeton Sioux Tribe Chairman Dave Flute explained in the aftermath of a 2017 TransCanada oil spill in what is now known as South Dakota, leakiness is an inherent condition of energy infrastructure: "It's not if pipelines leak, but when they will leak, and we're experiencing a leak, a pretty substantial amount. We want to know what was the cause, why it happened, and how much was spilled, and what impact that will have on our environment." California's electricity equipment-sparked fires are instances of systemic leakiness (not

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CALFIRE also ranks California's top twenty largest (by acre), deadliest, and most destructive fires. According to these rankings four of the top twenty largest fires (a full one fifth) and four of the top twenty deadliest fires (again, one fifth) were sparked by electricity equipment. In turn, nine of the top twenty most destructive fires (nearly one half) were electricity equipment caused.

CALFIRE. "Top 20 Deadliest California Wildfires." https://www.fire.ca.gov/media/5512/top20_deadliest.pdf.

CALFIRE. "Top 20 Destructive California Wildfires."

https://www.fire.ca.gov/media/5511/top20_destruction.pdf.

CALFIRE. "Top 20 Largest California Wildfires." https://www.fire.ca.gov/media/11416/top20_acres.pdf.

⁵ Worth, Katie, Karen Pinchin, and Lucie Sullivan. "Deflect, Delay, Defer": Decade of Pacific Gas & Electric Wildfire Safety Pushback Preceded Disasters." *Frontline PBS SoCal*. August 18, 2020. https://www.pbs.org/wgbh/frontline/article/pge-california-wildfire-safety-pushback/.

⁶ "It's not if pipelines leak, but when they will leak." *High Plains Reader*. November 17, 2017. https://hpr1.com/index.php/feature/news/its-not-if-pipelines-leak-but-when-they-will-leak.

discrete disasters – *when* not *if*), always already built into the grid's infrastructural system. A reading of the power grid as stable (as opposed to porous and leaky) reifies narratives of progress and Western modernity. Connecting my analysis of the systemically leaky power grid to the inevitable leakiness of oil pipelines enables me to borrow from petrocultural analyses and reveals the relationships between energy systems, environmental violence, and colonial worldmaking projects.

Theorizing California's electricity equipment-caused fires through pipeline leakiness produces knowledge about the way the grid, as an energy system, contours environments, dictates labor practices and conditions, and fuels culture, while also making sense-able through spectacular destruction (oil blowouts, molten arcs) the very real violence that can (and does) result from energy infrastructure leakiness. Reading the grid alongside oil pipelines (another infrastructure of energy transfer across distance), makes its inherent leakiness legible and connects the grid's leaked sparks to other forms of environmental leakiness such as the violences of toxic contamination, radiation, and exposures-over-time.

California's recent blazing superfires and smoke-chocked skies have ignited the apocalyptic imaginary of those living in and beyond the region.⁷ Spectacularized images of California in flames have come to stand in as a kind of visual metonym for the destruction promised by accelerating climate change. Since the 1980s, more than one seventh of California has burned.⁸ Eighteen of California's twenty most destructive fires have occurred in the

⁷ Since 2020, a variety of articles describing California's increasing blazes as "apocalyptic" have been published across popular news and media outlets, including *Buzzfeed News*, *CBS*, *ABC*, *The New York Times*, *The Guardian*, and *CNN*. The plethora of visual media — film and news footage, and photography — of California in blazes also speaks to the ways the fiery spectacle looms large in the current environmental imaginary.

⁸ Tending the Wild, "Cultural Burning," 12:18 - 12:23.

decades after 2000, with the remaining two taking place in the 1990s. Recently, the region's increasing and increasingly destructive fires have caused Forest Service and CalFire employees to shift to the "concept of a fire year," nostalgic for a time when fires did not rage year-round, and California had a "fire season." 10

However, California fires are not only caused by a changing climate. California's combustible landscape, exacerbated by human-caused drought and heat — and infrastructure systems, including its many miles of high-tension powerlines and century-old transmission towers¹¹ — come together in a perfect firestorm of colonial making. Like climate change, California's increasing fires must be contextualized within a history of racial and colonial violence.¹²

To account for 40% of California's "worst blazes," which were sparked by electricity equipment, it is necessary to turn to the spatiality of California's grid infrastructure, the terrain, and the history of electrification in the state. California's contemporary use of high-voltage

Brekke, Dan. "Report: PG&E Knew High-Voltage Lines Posed Fire Danger, but Put Off Repairs" *KQED*. July 10, 2019. https://www.kqed.org/news/11760156/report-pge-knew-about-extensive-power-line-problems-but-delayed-repairs-for-years

Westick, Peter. "Op-Ed: California is uniquely fire-prone thanks to its long romance with high- voltage power lines." *Los Angeles Times*. January 28, 2019. https://www.latimes.com/opinion/op-ed/la-oe-westwick-fires-california-history-electricity-20190128-story.html.

⁹ CALFIRE, "Top 20 Destructive California Wildfires."

¹⁰ Schweizer, Deb. "Wildfires in All Seasons?." June 27, 2019. https://www.usda.gov/media/blog/2019/06/27/wildfires-all-seasons.

¹¹Blunt, Katherine and Russell Gold. "PG&E Knew for Years Its Lines Could Spark Wildfires, and Didn't Fix Them." *Wallstreet Journal*. July 10, 2019.

¹² Potawatomi scholar Kyle Powys Whyte outlines how climate change is intensified colonialism in "Indigenous Climate Change Studies: Indigenizing Futures, Decolonizing the Anthropocene."

electricity transmission lines as a major component of its grid plays a crucial role in its electricity equipment—caused fires. ¹³ According to historical accounts, California's use of high-voltage lines can be traced back to fuel type (based on resource availability in the state) and the location of resources (the Sierra Nevada) in relation to the location of the state's coastal population centers. ¹⁴ California has never had easy access to coal. Instead, the region was an early adopter of hydroelectric power generation. ¹⁵ The sources of California's nineteenth and early twentieth-century hydropower were hundreds of miles from its cities, leading to its long-distance, dispersed grid configuration. To minimize power loss from out-of-state and other remote generation sites (Hoover Dam, for example), high-tension transmission lines were developed and installed to transport electricity across California's landscape. ¹⁶

PG&E's hydroelectric system, which today provides nearly four million households with electricity, is still made up of early gold rush—era water transportation technology.¹⁷ The same flume technologies that enabled gold rush hydraulic mining innovations and made it possible for miners to move massive amounts of water and reshape mountains continue to

¹³ Blunt and Gold, "PG&E Knew for Years Its Lines Could Spark Wildfires, and Didn't Fix Them"; Brekke, "Report: PG&E Knew High-Voltage Lines Posed Fire Danger, but Put Off Repairs."

¹⁴ Wright, Hamilton. "Long Distance High-Tension Transmission of Power in California." *Scientific American.* 1903. 88.20: 373-374.

¹⁵ Wright, "Long Distance High-Tension Transmission of Power in California."

[&]quot;Building California: Technology and the Landscape." California History. 1993. 77.2: 98-105.

PG&E *Currents*. "Gold, Water and Power, PG&E on the Stanislaus River." December 4, 2017. https://www.pgecurrents.com/2017/12/04/video-gold-water-and-power-pge-on-the-stanislaus-river/.

¹⁶ "Building California," 103.

¹⁷ PG&E Currents, "Gold, Water and Power, PG&E on the Stanislaus River."

transport water on behalf of PG&E's hydroelectric system. This use of flume technologies is an extractive and colonial example of infrastructural "remediation" wherein a new infrastructure system does not displace an older one but instead builds upon and transforms the older form of infrastructure. Through infrastructural remediation, the colonial ecologies and systemic extraction of mining continue to shape the region's relationship with water. The region's history of hydraulic mining provides context for the spatial configuration of PG&E's hydroelectric system and this historic template is also necessary to unpacking the interrelationships the grid enables and (violently) disrupts.

Popular histories of PG&E tout the utility's ties to the gold rush—such as a popular media account published in the *San Francisco Chronicle* that trumpets that "Tracing its corporate ancestry back to the California Gold Rush, the utility officially became PG&E in 1905." PG&E also celebrates its continued use of early gold rush—era water transportation systems in its corporate-sponsored film *Gold*, *Water and Power*, *PG&E on the Stanislaus River*. What these corporate histories erase in their triumphal narratives of developmental progress and electrified modernity include the extreme environmental degradation caused by hydraulic mining practices and the colonial genocide of Native Californian peoples wrought by the gold rush.²¹

¹⁸ "Building California,"103; PG&E *Currents*, "Gold, Water and Power, PG&E on the Stanislaus River;" Wright, "Long Distance High-Tension Transmission of Power in California."

¹⁹ Bolter, Jay David and Richard Grusin. *Remediation: Understanding New Media*. Cambridge: MIT Press, 1999.

²⁰ Doyle, "Utility Giant Grew from Gold Rush Roots."

²¹ Risling Baldy, Cutcha. "Genocide and Fugly Chairs: What Antiques Roadshow left out of

Cutcha Risling Baldy, of Hupa, Yurok, and Karuk descent, writes that "the Gold Rush (beginning in 1849) not only brought in thousands of people hoping to find gold, it also included the attempted genocide of California Indian people." Ohlone/Costanoan Esselen and Chumash scholar and poet Deborah Miranda recounts how California's goldfields were "the middle of one of the bloodiest genocides ever documented, one approved and funded by the United States government." Miranda and Risling Baldy's accounts of the California gold rush history lay bare the colonial violence surrounding PG&E's celebrated flume infrastructure and highlight what both PG&E's and the *San Francisco Chronicle*'s corporate histories fail to acknowledge: the history of the region that is now known as California includes triplicate and ongoing colonial regimes—first the Spanish, then the Mexican, and, into the present, the US. These colonial regimes contour environments, impacting relations with lands, waters, and more-than-human life. California's current relationship to fire is fueled by colonial worldmaking, ²⁴ extractive racial capitalism, ²⁵ and the ongoing Western nature/culture binary.

Seth Kinman's legacy." North Coast Journal of Politics, People, and Art. April 11, 2019. https://www.northcoastjournal.com/humboldt/genocide-and-fugly-chairs/Content?oid=13800417.

Miranda, Deborah. Bad Indians.

²² Risling Baldy "Genocide and Fugly Chairs."

²³ Miranda, *Bad Indians*, 45.

²⁴ CIEJ explains, "It is dangerous to reduce climate change to an 'emissions' issue and to leave intact the extractive and oppressive processes that caused climate change in the first place." They identify these extractive and oppressive processes as the "co-constitutive systems of oppression: white supremacy, settler-colonialism, heteropatriarchy, capitalism, the nation-state, and land and water dispossession" (CIEJ, "No Comemos Baterías").

²⁵ As Cedric Robinson outlines in *Black Marxism: The Making of the Black Radical Tradition*, racism is not auxiliary to capitalism, but is instead central to it. Laura Pulido extends Robinson's theorizing in "Geographies of race and ethnicity II: Environmental racism, racial capitalism and state-sanctioned violence," to remind readers succinctly that all "capitalism is racial capitalism" (4).

The current conceptualization of fire as only ever dangerous and destructive started with the Spanish, who viewed Native Californian peoples' cultural burning practices as careless.²⁶ In the early 1900s the US Forest Service adopted a policy of fire suppression to maximize the number of trees per acre, and thus any fire was viewed as threatening to timber resources.²⁷ US government agency records from the early twentieth century include derogatory references to cultural burning, deriding Indigenous burning practices and claiming that they were harmful to forests.²⁸ Burn suppression policies stayed in place until the 1970s. Before the genocide of the Gold Rush,²⁹ it is estimated that 4.5 million acres were burned annually throughout Indigenous California.³⁰ To understand the scale of burning happening in the region before colonial conquest, 4.5 million acres is approximately 4.5% of California's total acreage, or roughly 18 times the area of the Thomas Fire. While fire has been slowly reintroduced to the landscape, only a small fraction of lands are burned that once were. Beginning with Spanish conquest and continuing into the present with CalFire and US Forest Service policies, fire suppression and the limiting and banning of prescribed/controlled burning became standard land management practices. Fire suppression, born out of a commodification of the land and desire to maximize profit through resource extraction, enables regional colonial worldmaking and its control of the land.

²⁶ Tending the Wild, "Cultural Burning," 10:12 - 10:35.

²⁷ Tending the Wild, "Cultural Burning," 10:43 - 11:26.

²⁸ Long, Jonathan W., Frank K. Lake, and Ron W. Goode. The importance of Indigenous cultural burning in forested regions of the Pacific West, USA." *Forest Ecology and Management*, 2021. 500. 119597: 2.

²⁹ Risling Baldy, "Genocide and Fugly Chairs;" Miranda, *Bad Indians*.

³⁰ Kerlin, Kat. "Rethinking Wildfire: Cultural Burning and the Art of Not Fighting Fire." October 1, 2020. https://climatechange.ucdavis.edu/news/rethinking-wildfire/.

Yet, other relationships to fire exist. The multimedia series *Tending the Wild*, produced with the guidance of Chumash Weaver Timara Lota Link, shines light on the Traditional Ecological Knowledge (TEK) of Indigenous people across what is now known as California. The series features the ways in which Native Californians have "actively shaped and tended the land for millennia,"31 emphasizing how Native people and Traditional Ecological Knowledges are, and have been, necessary to living in balance with nature. The first episode, "Cultural Burning," opens with a slow pan through the aftermath of a fire at the Kaweah Oaks Preserve in Tulare County, California. As the camera moves, The Honorable Chairman Ron W. Goode, of the North Fork Mono Tribe, sings. Against the backdrop his recorded song provides, Goode says, "You have to know how to work with fire." 32 In their article, "The importance of Indigenous cultural burning in forested regions of the Pacific West, USA," Goode, Jonathan Long, and Frank Lake define cultural burning as "the purposeful use of fire by a cultural group ... for a variety of purposes and outcomes. Other terms such as Indigenous fire management, Indigenous burning, and Indigenous stewardship encompass cultural burning ... cultural burns are preceded by extensive site preparation as part of a land stewardship tradition."33 For over ten thousand years, Native Californians conducted cultural burns to create "diverse habitat mosaics ... The careful application of fire increased fruit and seed production, caused new growth that was better suited for making baskets, and reduced the fuel

³¹ *Tending the Wild*, description of series on website: https://www.kcet.org/shows/tending-the-wild#overview.

³² Tending the Wild, "Cultural Burning," 00:00 - 00:38.

³³ Long, Lake, Goode, "The importance of Indigenous cultural burning in forested regions of the Pacific West, USA," 3.

load that could be burned by naturally occurring wildfires."³⁴ Cultural burning is different from, and cannot be reduced to, settler forestry practices of prescribed burning in that cultural burning is about more than merely preventing worse fires later on. Cultural burning maintains Indigenous rights, responsibilities, and well-being. Importantly, this chapter seeks to support Native Californian self-determination and land relations. It is not prescriptive – it actively opposes the extraction of Indigenous knowledges, including the application of fire, in order to shore up White colonial futurity on stolen lands and waters. Kat Kerlin sums up the difference between cultural and prescribed burning in "Rethinking Wildfire: Cultural Burning and the Art of Not Fighting Fire." Kerlin writes, "Similar to how the shift of one consonant transforms what was 'scared' into 'sacred,' so resembles the distinction between prescribed and cultural burns."



³⁴ *Tending the Wild*, "Cultural Burning," description of film: https://www.youtube.com/watch?v=Z-EXQ9be8mE&ab_channel=KCET.

³⁵ Long, Lake, Goode, "The importance of Indigenous cultural burning in forested regions of the Pacific West, USA," 14.

Figure 2. A cultural burn project led by a firecrew from Greenville Rancheria and under the guidance of elders to promote beargrass near Canyon Dam on the Plumas National Forest (Long, Lake, Goode, "The importance of Indigenous cultural burning in forested regions of the Pacific West, USA," 3). Photo by Reina Rogers.

Cultural burning not only increases environmental diversity, it also sustains Native cultural practices and lifeways. Goode explains, "culture means 'to cultivate." He elaborates, "Cultural burning is exactly that ... when we burn we are burning ... to supply resources for our culture. Whether it be food, medicine, fiber, sticks – basketry material." Native Californian basketmaking practices are natural/cultural, spiritual, philosophical, artistic, narrative, and functional. Not only do Indigenous Californian basket-making practices include the care for riparian zones and the careful tending of the communities of plants that supply basketmaking materials, the baskets themselves are also a form of ecological knowledge. When describing what a healthy California forest looks like, Goode draws on the ecological knowledge created by Native basketry practices:

You need to be able to see through the trees. The concept that we are bringing forth when we work out on the land is this open concept. We need to be able to see through. When the baby is inside of the basket. Look through the basket. See the world. See through the basket to the outer world. See through the forest. See through this world to the next world. Always the ability to see through.³⁸

³⁶ Kerlin, "Rethinking Wildfire: Cultural Burning and the Art of Not Fighting Fire."

³⁷ Tending the Wild, "Cultural Burning," 1:55 - 2:14.

³⁸ Tending the Wild, "Cultural Burning," 4:31 – 5:08.

Throughout the documentary, Goode articulates a relationship with the land that is co-constitutive, natural/cultural, reciprocal, and connected. Fire is one of the ways Native Californians have a relationship with the land and honor its animacy. Indigenous cultural burning is a central way of listening to, speaking with, and caring for the land and the diverse more-than-human beings who also call it home as relatives.

Striving to think alongside Goode, and inspired by his description of land as an open concept, the need to see through the forest, and the ongoing labor of caring for the land and clearing brush, this chapter ventures to take up the labor of "clearing brush" in order "see through" narratives colonial modernity tells about the past, present, and future of the California region and its relationship to fire. Through the labor of "clearing brush" in order to "see through," I strive to stage a series of imaginative and narrative openings that puncture White settler colonial imaginaries of California's lands, waters, and more-than-human life. By "seeing through," I am not trying to shoehorn a Western hermeneutics of suspicion, or the colonial knowledge practices of transparency, but instead hope to highlight the care and reciprocity that are part of brush clearing as a practice, and the ways that "nature" and "culture" are entangled.

The photograph by Mike Eliason that opens this chapter, like all spectacularized photos of environmental violence that circulate in the aftermath of disaster, is entangled with cultural ways of seeing, experiencing, and being in the environment. Laguna Pueblo author Leslie Marmon Silko unpacks how the English-language concept of landscape "assumes the viewer is somehow outside or separate from the territory he or she surveys." Silko

³⁹ Silko, Leslie Marmon. "Landscape, History, and the Pueblo Imagination," *The Ecocriticism Reader* (Athens: The University of Georgia Press, 1996), 265-66.

instructs, "are as much a part of the landscape as the boulders they stand on. There is no high mesa edge or mountain peak where one can stand and not immediately be part of all that surrounds."40 Silko's critique of Western cultural environmental perspectives and the Euro-American nature/culture binary illuminates how landscape-style images of environmental disaster are often shared separately from the histories, environments, and relationships of whom they are part. Such images offer viewers spectacular, but decontextualized images with little or no guide for interpretation. Landscape-style images of environmental disasters work to sever viewers from their embeddedness within the environments the images depict and are viewed within. As a window into California's fires, the frame of Eliason's photo hides the fire's impact on human communities, conceals the human labor of fighting the fire, and masks the human photographer who captured the image. The only clues of human presence in the midst of the fiery destruction are the transmission towers, which act as a visual metonym for human society. Linking the human and electricity technology works to define what it means to be human through the lens of Western developmental modernity, and paints the region's relationship to fire as one of totalizing destruction.

The Thomas Fire burned through the unceded, traditional lands and waters of the Chumash people, who are also the people Indigenous to where I live and study. As a non-Native scholar whose research is produced within the colonial US university system, it is important to highlight the Chumash peoples and their traditional ways of caring for and being in relationship with the region's lands and waters, which have been interrupted by historical and ongoing colonialism. In *Earth Wisdom: A California Chumash Woman*, Chumash land protector Pilulaw Khus recounts Chumash life before colonization:

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⁴⁰ Silko, "Landscape, History, and the Pueblo Imagination," 265-66.

How did the old people live with respect, and honoring that Sacredness or Life Force? We did not overuse resources, nor disregard them, nor did we use them in a frivolous way. Instead of destroying resources, we enhanced those resources ... We used controlled burning to keep forest areas clear so that the animals and the plants could live throughout the forest areas ... We did not have these huge uncontrolled fires.⁴¹

Khus's account links colonization, its land management practices, and the prevalence of superfires. She also connects Native lifeways and cultural burning, showing that cultural burning and being in reciprocal relation with the land and more-than-human life are central to Native Californians' self-determination and sovereignty.

California's current colonial cultural imaginary of fire is prophetic. Burn suppression results in a buildup of dead trees, dry tinder, and flammable chaparral, and contributes to larger, more destructive, out of control fires. Abran Lopez, a member of the Amah Mutsun Native Stewardship Corps., explains:

Fire is going to be on the land whether we like it or not. We could either choose when and where and how we prepare for it and how to deal with it. Or, continue on with fire suppression and hope that it do[es]n't come back. But it eventually will. And the problem is that it becomes these high intensity superfires that cause nothing but damage. There is no benefit to it.⁴²

Superfires, as Lopez explains, do not regenerate the land, instead they sterilize the soil and kill seeds in its seedbank. Fearing fire renders a totalizing view of it as something to be suppressed.

⁴¹ Broyles-González, Yolanda and Pilulaw Khus. *Earth Wisdom: A California Chumash Woman* (Tucson: University of Arizona Press, 2011), 60.

⁴² Tending the Wild, "Cultural Burning," 12:19 -12:52.

Imagining fire to only ever be a force of threatening destruction creates a self-fulfilling prophecy, directly contributing to the region's increasing and increasingly destructive fires. Suppressing fire is one of the ways that colonialism in California fuels and sustains itself — subsuming the future of fire on these lands, and the Indigenous lifeways it supports, under its destructive prophetic self-fulfillment.

The word "wildfire," which both CalFire and Southern California Edison use to describe California's fires, obscures the history of civilizational projects of capitalist development and colonial settlement in California. The term "wildfire" operates within colonial time, in that it conjures the romanticized image of a sweeping fire burning through the undeveloped forests of the Sierras and the chaparral covered hills of the central coast – not the gritty smoke of the Northern California Camp Fire as it destroyed more than 14,000 structures and resulted in the death of at least 84 people in 2018.⁴³ Eleven of California's twenty most destructive "wildfires" were caused either by electricity equipment (nine) or arson (two)⁴⁴ – not exactly ignited in an uninhabited natural environment as the word "wildfire" implies. The Oxford English Dictionary (OED) defines "wild" as "living in a state of nature;" when referring to a place or region: "uncultivated or uninhabited; hence, waste, desert, desolate;" and when referring to a person: "uncivilized, savage; uncultured, rude; also, not accepting, or resisting, the constituted government; rebellious." More specifically, wildfire implies "'natural, not artificially produced', or 'out of doors, not domestic." As the definitions reveal, the word "wild" reinforces hierarchical colonial dichotomies between nature and culture, civilized and savage, that not only reinscribe colonial power and construct a particular version

⁴³ Worth, Pinchin, Sullivan, "Deflect, Delay, Defer."

⁴⁴ CALFIRE, "Top 20 Destructive California Wildfires."

of linear history toward civilizational progress, but also fail to address the complexity and entanglements of California's current fires. The conception of wild regions as uninhabited evokes a violent imaginary of human erasure, akin to the one perpetuated by colonial settlers in the American West. This kind of erasure performs a dehumanizing violence. The incongruity of the definition of "wildfire" and its use to describe California's increasing fires, regardless of how they ignite, not only fails to acknowledge human impact, but more specifically, they obscure who and what is responsible for this impact. Describing California's fires as "wild" accomplishes parallel rhetorical erasures as describing the flooding, levee breaks, lack of assistance or emergency response, and increased violent policing that followed Hurricane Katrina as "a natural disaster." Both descriptions enforce a false dichotomy between human society and nature and in so doing, make invisible the structural racism and matrix of colonial power fueling the twenty-first century's spectacular environmental violence.

In response to the spectacular environmental and infrastructural violence of California's increasing superfires, the state uses the labor of incarcerated people to buffer the property and people it deems to matter. California's incarcerated firefighting force starkly highlights the ways environmental violence lays bare dehumanizing hierarchies of power. In the case of California fires, this hierarchy is enforced by the prison-industrial complex, and falls along racial and colonial lines. Black, Native, and Latinx Californians face

⁴⁵ The state has a long history of buffering environmental violences with the absorbent labors of incarcerated people. For example, incarcerated laborers were brought to Santa Barbara from San Louis Obispo, Santa Clara, and San Diego to perform the toxic task of cleaning up Santa Barbara's beaches after the 1969 oil spill.

LeMenager, Stephanie. *Living Oil: Petroleum Culture in the American Century* (Oxford: Oxford University Press, 2014), 60-61.

disproportionate rates of incarceration compared to White Californians.⁴⁶ Specifically, the Black to White incarceration rate per 100,000 people in California is 9.3:1.⁴⁷ California has had a firefighting program that is dependent on incarcerated labor since 1945.⁴⁸ At its onset, the program was designed to replace the firefighters who had been drafted in World War II.⁴⁹ The program continues throughout California, with as many as 3,700 incarcerated men and women — and, until 2020, the program included incarcerated minors — making up one third of California's firefighting force.⁵⁰ Incarcerated firefighters are paid between \$2.90 and \$5.19 per day, plus an additional \$1 an hour when actively fighting fires.⁵¹

Incarcerated firefighters absorb the sparks from electricity infrastructure with their bodies and labor. David Pellow in *What is Critical Environmental Justice*, evidences the ways that the US prison-industrial complex contributes to a myriad of environmental injustices, urging readers to understand that prison abolition is an environmental justice issue.⁵² Pellow defines prisons as "legally sanctioned sites of enslavement through the incapacitation of human

⁴⁶ Prison Policy Initiative. "California Profile." https://www.prisonpolicy.org/profiles/CA.html.

⁴⁷The Sentencing Project, "State-by-State Data." https://www.sentencingproject.org/the-facts/#map.

⁴⁸ Hess, Abigail. "California is paying inmates \$1 an hour to fight wildfires." *CNBC*. August, 14, 2018. https://www.cnbc.com/2018/08/14/california-is-paying-inmates-1-an-hour-to-fight-wildfires.html.

⁴⁹ Hess, "California is paying inmates \$1 an hour to fight wildfires."

⁵⁰ Neklason, Annika. "California is Running Out of Inmates to Fight Its Fires." *The Atlantic*. December, 7 2017. https://www.theatlantic.com/politics/archive/2017/12/how-much-longer-will-inmates-fight-californias-wildfires/547628/

⁵¹ Goodkind, Nicole. "Prisoners Are Fighting California's Wildfires on the Front Lines, But Getting Little in Return." *Fortune*. November 1, 2019. https://fortune.com/2019/11/01/california-prisoners-fighting-wildfires/.

⁵² Pellow, David Naguib. What is Critical Environmental Justice?.

beings and through widespread forced labor."⁵³ While California's firefighting program is considered "voluntary," strong incentives for participating in it exist, including that it is the only prison program in the state that offers two-to-one early release credits (meaning for every two days inmates participate they get one day off their sentence).⁵⁴ This is a conscious decision by the State of California, which fought lawsuits that would expand the credits to other programs – the Attorney General expressed concern in court filings that if other programs offered the same deal that inmates would not volunteer for the firefighting program due to its intense labor demands and danger.⁵⁵ California's system of incarcerated firefighters makes explicit the ways that colonial fire management practices are entangled with multiple states of unfreedom.

In her challenge to the racial blindness of the Anthropocene, Katherine Yusoff theorizes how "the proximity of black and brown bodies to harm in this intimacy with the inhuman ... is predicated on the presumed absorbent qualities of black and brown bodies to take up the body burdens of exposure to toxicities and to buffer the violence of the earth." As Yusoff explains, profit-driven and extractive relationships to the environment, contemporary colonial oppression, and the prison industrial complex's ongoing system of enslavement, all of which

As Pellow reminds his readers the 13th Amendment legally enshrines this form of enslavement (Pellow, *What is Critical Environmental Justice?*). The first section of the 13th Amendment reads: "Neither slavery nor involuntary servitude, except as a punishment for crime whereof the party shall have been duly convicted, shall exist within the United States, or any place subject to their jurisdiction."

⁵⁴ Goodkind, "Prisoners Are Fighting California's Wildfires on the Front Lines, But Getting Little in Return."

⁵⁵ Goodkind, "Prisoners Are Fighting California's Wildfires on the Front Lines, But Getting Little in Return."

⁵⁶ Yusoff, A Billion Black Anthropocenes or None, xii.

shape the states of unfreedom that currently condition California's current relationship to fire, are "predicated on the presumed absorbent qualities of black and brown bodies ... to buffer the violence of the earth." What might it mean to reimagine the region's relationship to fire? Can refusing to reduce fire to a purely destructive force, honoring fire's power for regenerative renewal, combat the region's colonial worldbuilding? What might it mean to learn from, what Amrah Salomón J. (of Akimel O'odham and Tohono O'odham descent) describes as, the "wisdom in fire"?⁵⁷ Does reconceptualizing fire make other formations of environment, power, identity, and resistance in the region possible?

Stefani Cox's short story, "Fyrewall" – originally published in the anthology *Glass and Gardens: Solarpunk Summers* (2018) and which is available to listen to on the LeVar Burton Reads podcast – provides one such imaginary, giving readers a glimpse of regional worldbuilding *with* fire instead of against it. "Fyrewall" depicts a Los Angeles that while fearful of fire's destructive force also recognizes its powerful capacities to rejuvenate and heal. I read "Fyrewall" as operating within a genealogy of Black feminist speculative reimaginings of the Southern California region established by Octavia Butler's *Parable of the Sower* (1993) and *Parable of the Talents* (1998). Butler's *Parable of the Sower* and Cox's "Fyrewall" are more than just imaginative models – instead, they are complex processes of literary place making. Such literary worlds, as Katherine McKittrick writes about places negotiated by Black women, are "unmistakably geographic, and imaginatively real, in multiple ways." Butler and Cox's literary imaginaries present a California shaped by Black feminist ecological thought –

⁵⁷ Salomón J., Amrah. "Decolonizing the Disaster: Defending Land & Life During Covid-19," *Political Theology*. 2020.

⁵⁸ McKittrick, Katherine. *Demonic Grounds: Black Women and the Cartographies of Struggle* (Minneapolis: University of Minnesota Press, 2006), 21.

refusing US cultural constructions of the environment as a space for and concern of White people.⁵⁹

I bring Cox and Butler's Black Feminist speculative imaginaries into conversation with Indigenous relationships to fire not to collapse Blackness and Indigeneity into a simplified or imposed solidarity, or single mode of ecological thought. Rather, these stories highlight other formations of being in relation to lands and life that also unsettle White environmentalism and work against colonial futures and ways of being in the region. W.E.B Dubois wrote that he came to understand "whiteness as the ownership of the Earth forever and ever." Tiffany Lethabo King writes in *The Black Shoals: Offshore Formations of Black and Native Studies*, that "Black abolition and Native decolonization" put "White humanist thought under stress" and can be "projects that frustrate liberal (and other) modes of humanism and offer new forms of sociality and futurity." Kings' assertion is echoed in the NDN Collective's LANDBACK "is

⁵⁹ For more on the racist history and structures of anti-Blackness undergirding the cultural construction of the environment as a space for White people, read Jennifer James, "Ecomelancholia: Slavery, War, and Black Ecological Imaginings."

⁶⁰ Dubois, "Souls of White Folk," 29.

⁶¹ King, The Black Shoals, xv.

⁶² As Eve Tuck and K. Wayne Yang remind, the process of decolonization is more than a metaphor (Tuck and Yang 2012). Integral to decolonization is the return of stolen land to Indigenous nations as a means of spatially and materially enabling Indigenous sovereignty, self-determination, and land relations (Tuck and Yang, "Decolonization is not a Metaphor").

Important to a project like this, which works to put Black Studies and Native Studies in conversation with each other, is Tapji Garba and Sara-Maria Sorentino's response to Tuck and Yang. In "Slavery is a Metaphor," they offer a critical analysis of Tuck and Yang, arguing that "Decolonization is Not a Metaphor," reduces slavery to forced labor, creates a false division between the material and symbolic, forecloses an analysis of slavery by engulfing it in the settler colonial paradigm, and subsumes all other liberatory struggles into decolonization (Garba and Sorentino, "Slavery is a Metaphor").

interconnected with the struggles of all oppressed Peoples."⁶³ Their advocacy for Native "belonging to the land – because – we are the land" is intimately wrapped up in a "future where Black reparations and indigenous LANDBACK co-exist. Where BIPOC collective liberation is at the core."⁶⁴ Their LANDBACK Campaign Demands show how the white supremacist power structures and the mechanisms that enforce them – such as the Bureau of Land Management, Police, ICE, and border patrol – destructively disrupt Indigenous relationships with the land and water and enact state-sanctioned racist violence.

Butler and Cox's storytelling centers on the leadership, expertise, interior lives, ecological knowledge, and memories of Black women characters. Butler, through her Black feminist imaginary conjures a speculative California home to human difference, where the experiences of being marginalized provide tools and skills for leadership during troubling times. In this way, Butler's stories perform their own kind of "brush clearing" that sees through and refuses White environmental imaginaries that envision the White male conservationist as the ideal environmental actor – favoring instead complex multicultural, multiracial, and hybrid alternative communities that thrive due to difference.

⁶³ NDN Collective, "Land Back Manifesto."

⁶⁴ NDN Collective, "Land Back Manifesto."

⁶⁵ I use Black feminist (instead of, for example, Alice Walker's powerful formulation of "womanist") throughout this chapter because that is what I understand Butler to identify as. At a panel discussion filmed at UCLA in 2002, she refers to herself as a feminist. She said, "I'm a 48-year-old writer who can remember being a 10-year-old writer and who expects someday to be an 80-year-old writer. I'm also comfortably asocial — a hermit in the middle of Los Angeles — a pessimist if I'm not careful, a feminist, a Black, a former Baptist, an oil-and-water combination of ambition, laziness, insecurity, certainty, and drive."

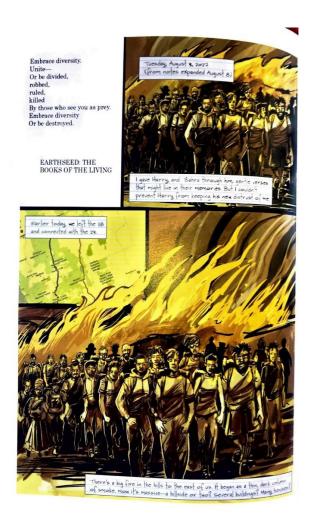


Figure 3. "Embrace diversity. / Unite -- Or be divided ... / Embrace diversity / Or be destroyed. / EARTHSEED: THE BOOK OF THE LIVING, from page 160 of Parable of the Sower, adapted and illustrated by Damian Duffy and John Jennings. Photograph by Sage Gerson.

Butler's prescient future imaginary of California, which is shaped by fire, global climate change, an authoritarian White supremacist president, and social breakdown – as well as the tools the novel and its protagonist Lauren provide readers with for surviving and thriving during difficult times – has inspired a growing community of creatives. A graphic novel version of *Parable of the Sower*, adapted and illustrated by Damian Duffy and John Jennings

(who also teamed up to adapt Butler's novel *Kindred* into graphic form in 2017), was released in 2020. Duffy and Jennings' adaptation gives visual form to Butler's Black feminist speculative California. Their ekphrastic art figures the future of the Golden State in a scorching palate of reds, yellows, oranges, and browns. In the graphic adaptation, readers see fire spring to life, active flames sparking across seventy-four of the graphic narrative's panels, like those depicted in figures 3 and 4, and bursting across seven spectacular full-page spreads. The attention to Butler's world that the graphic novel renders visible adds additional narrative layers to the story, drawing reader's attention to fire's destructive force, and to the spectacular change it catalyzes. Duffy and Jennings' adaptation joins Toshi Reagon and Bernice Johnson's sonic reimagining *Octavia E. Butler's Parable of the Sower: An Opera*, and Toshi Reagon and adrienne maree brown's podcast series *Octavia's Parables*.

First published as a novel in 1993, *Parable of the Sower* tells the story of Lauren Oya Olamina and her personal spiritual journey founding the religious community Earthseed – which identifies and works to shape God as change. *Parable of the Sower* opens with Lauren recounting a reoccurring dream. Fire features prominently in it, springing, eating, and reaching for her. ⁶⁶ Lauren's dream fire acts as a metaphor for the anxiety she feels about leaving her father's Christian religion to shape her own, Earthseed. Lauren's dream introduces the ways in which fire catalyzes the novel's plot, simultaneously wreaking destruction and making change possible. Butler's future fires are represented as both dangerous – "like a living, malevolent thing" ⁶⁷ – and as a catalyst for necessary, though difficult, change. As the Native Californian community firecrews instruct viewers in "Cultural Burning," "You have to have fire in order

⁶⁶ Butler, Octavia. *Parable of the Sower* (New York: Four Walls Eight Windows, 1993), 4.

⁶⁷ Butler, *Parable of the Sower*, 309.

to have rejuvenation."⁶⁸ Butler's complex fiery future centers an acknowledgement of fire's capacity for destruction, but also the way it ignites change and sparks renewal.



Figure 4. "In order to rise / From its own ashes / A phoenix / First / Must / Burn. / EARTHSEED: THE BOOK OF THE LIVING," from page 122 of Parable of the Sower, adapted and illustrated by Damian Duffy and John Jennings. Photograph by Sage Gerson.

Like in *Parable of the Sower*, whose plot and character development are catalyzed by fire, "Fyrewall's" literary storyworld is shaped by fire and heat. "Fyrewall," also clears the

⁶⁸ Tending the Wild, "Cultural Burning," 16:33 - 16:39.

brush to see through colonial fire narratives and honor fire's complex potential for damage, and its ability, as Cox describes, to "nourish" and "heal." Cox's "Fyrewall" tells a speculative electrifiction, one that renegotiates Southern California's infrastructural relationship to fire. The short story is set in and around a hot and dry future Los Angeles, where temperatures regularly exceed 130 degrees Fahrenheit and memories of the region's ravaging fires threaten. Daesha, the story's protagonist, is in charge of maintaining Los Angeles's fyrewall, a vast self-sustaining "blue, shimmering sheet of compressed oceanwater" that protects the city from passing fires and the everyday intense heat, while also providing the city's inhabitants with a carbon-free source of power.

The story begins with Daesha, and her two teen mentees Talia and Carlos, investigating a recent dip in the fyrewall's power outputs. Dispatched to investigate and repair, the three encounter a hole in the wall. Alarmed at this discovery, and the vulnerable condition in which it leaves the city, Daesha and the two teens attempt to diagnose the wall's ailment — the stakes of their repair work heightened by the smell of smoke warning of an approaching fire. The remedy is discovered on accident. Talia absentmindedly plays with a lighter, "and the wall streamed out to touch it, absorbing only the flame. The color in the piece of wall that reached out brightened from aqua to a rich green. As the wall pulled itself back into place, it looked different, somehow, newer. *Healed*." Here is the short story's turn, its plot twist – fire, while

⁶⁹ Cox, Stefani. "Fyrewall." *Glass and Gardens: Solar Punk* (Summers Albuquerque: World Weaver Press, 2018), n.p.

⁷⁰ Cox, "Fyrewall," n.p.

⁷¹ Cox, "Fyrewall," n.p.

initially a threatening source of fear, spurring on their repairs, is flipped, becoming the source of regenerative healing.

The relationship between the fire and the sustaining infrastructure that powers the region turns out to be one of renewal and nourishment. Daesha exclaims, "It's gone symbiotic ... the wall was created as standalone technology, but it's been absorbing the power of the fire that hits it! The wildfires don't damage the wall, they make it stronger. The wall needs the flames."⁷² Symbiosis, or the mutually beneficial relationship between two different kinds of beings, reimagines a very different infrastructural relationship to fire than currently exists in the region – a model, Cox's story shows, that is grounded in Black feminist imaginaries of place and environment.

Unlike Cox's "Fyrewall," the 2017 Thomas Fire is paradigmatic of California's current infrastructural relationship to fire: its ignition and regional destruction laying bare the consequences of worldmaking *against* fire. The infrastructures powering California, instead of existing symbiotically with the region, make it more fire prone. The Thomas Fire reveals the incongruity of representing infrastructure as a passive system that benignly sits atop the landscape. Instead, contextualizing infrastructure-caused fires draws attention to how an extractive society has built their world, and the ways infrastructures interact with and contour the environment. Instead of upholding the colonial worldmaking practices of pitting the region's resources and infrastructure against fire, in Cox's story, the region builds *with* fire. Fire becomes its own kind of elemental infrastructure that connects human culture to the surrounding lands and waters.

⁷² Cox, "Fyrewall," n.p.

Living with fire enables connection and reciprocal relations to the land in Cox's storyworld. In "Fyrewall," Cox describes the wall as saving the city's "sovereignty." While I in no way mean to collapse struggles for Indigenous sovereignty against the ongoing colonial matrix of power with Cox's imagined Los Angeles, I point this out to emphasize the liberatory relationship of living and building with fire – a relationship that I believe refuses colonialism's destructive prophetic foreshadowing. In "Fyrewall," Cox is unequivocal that the fyrewall's infrastructural technology is "not a miracle" 73 - not some kind of science fictional supertechnology that further severs human culture from its surrounding environments, proving the supremacy of the colonial West over nature – but instead as a being that further connects Los Angeles to its surrounding environments. Daesha describes the fyrewall as "made up of earth, and minerals, and water, just like the rest of us" and as "an extension of her own body [Daesha's grandmother, the creator of the wall]."74 Susan Leigh Star and Geoffrey Bowker posit that "the relational quality of infrastructure talks about that which is between."⁷⁵ Infrastructure, as reimagined by the fyrewall, comes between Los Angeles and its surrounding environment to facilitate relationality.

Like a computer firewall, readers may initially understand Cox's fyrewall as a security barrier between Los Angeles and its surrounds. However, after the story's plot twist, after the story has shared the walls' creation, symbiosis, and interactivity, it becomes clear that the fyrewall may be that which is between Daesha (and the wider-Los Angeles community) and

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⁷³ Cox, "Fyrewall," n.p.

⁷⁴ Cox, "Fyrewall," n.p.

⁷⁵ Star, Leigh Susan and Geoffrey Bowker. "How to Infrastructure," *Handbook of New Media: Social Shaping and Social Consequences of ICTs* (London: SAGE Publications Ltd., 2002), 231.

the heat and fire of the region's environments, but it does not sever, separate, suppress, or dichotomize. Instead, like the basket Goode describes in "Cultural Burning," it facilitates relationality with the surrounding lands and waters. In this way, Cox's Black feminist imaginary denies the Western Euro-American binary between nature and culture in a move that quilts her characters, imagined Los Angeles, fyrewall, and the land together. "It's beautiful, thought Daesha. I never needed to fix the wall, just nourish it" (emphasis in original). As one of the cultural burning participants featured in Kerlin's article confirms, "Seeing fire used for good can be healing ... It's transformative."

My reading and thinking about California's fires has changed over the years, shaped by meaningful conversations, new textual encounters, and current events. Research is not produced in a vacuum: my experience of and thinking about 2020's smoke-choked skies were mediated by what Herman Gray, in the wake⁷⁸ of the 2020 murder of George Perry Floyd Jr. at the hands of the US's militarized occupying police force, describes as "the incredible insights and the incredible language of 'I can't breathe." Gray's remarks focused on the way

Sharpe, Christina. *In the Wake: On Blackness and Being* (Durham: Duke University Press, 2016), 13-14.

⁷⁶ Cox, "Fyrewall," n.p.

⁷⁷ Kerlin, "Rethinking Wildfire: Cultural Burning and the Art of Not Fighting Fire."

⁷⁸ I use "in the wake" here in direct reference of Christina Sharpe's *In the Wake: On Blackness and Being.* Sharpe proposes that "to be *in* the wake is to occupy and be occupied by the continuous and changing present of slavery's as yet unresolved unfolding. *To be* 'in' the wake, to occupy that grammar, the infinitive, might provide another way of theorizing." With each definition of wake considered by Sharpe, she argues "that rather than seeking a resolution to blackness's ongoing and irresolvable abjection, one might approach Black being in the wake as a form of *consciousness.*"

⁷⁹ Davis, Angela Y, Herman Gray, Gaye Theresa Johnson, Robin D. G. Kelley, and Josh Kun. "Race at a Boiling Point: The Fire This Time." *UCHRI*. 2020. https://uchri.org/events/race-at-boiling-point-event-series/: 8:10 - 8:17.

that the patterning of breath and the inability to breathe make perceivable the interwoven conditions of environmental racism, anti-Black police violence, pandemic injustice, and violence at the borders of colonial nation states – the layered "conditions that define this moment of crisis and opportunity." In response to George Floyd's murder, the Black British music collective Sault dropped their third musical album, *Untitled (Black Is)*. The recording performs the work of collective grief and mourning, while also enunciating Black empowerment and resistance. Sault's sonic worlding acoustically spans the Atlantic and speaks to the collective experience of Blackness in the diaspora. The album's "exquisite and excoriating standout" track is titled "Wildfires."

"Wildfires" directly follows the one minute fifty-three second recording "Don't Shoot Guns Down," which pairs a strong drumline with a background of sirens and the lyrics: "Don't Shoot Guns Down / Don't Shoot I'm Innocent / Racist Policeman," spoken over the top. 82 These sounds of protest are then juxtaposed with the smooth, slow, and meditative opening sounds of "Wildfires." The vocals are soft and soothing, immersing close listeners in a sonic world where the multiple meanings of being "in the wake" as Christina Sharpe writes about them – in the wake of the slave ship, a watch or vigil for those who have died, and the ritual of mourning and/or celebration – are all auditorily and emotionally present. 83 Sault's lyrics read: "You should be ashamed / The bloodshed on your hands / Another Man / Take off your badge

⁸⁰ Davis and Gray et al, "Race at a Boiling Point: The Fire This Time," 8:26 - 8:29.

⁸¹ Petridis, Alexis. "Sault: Untitled (Rise) review – mystery collective make best album of 2020, again" *The Guardian*. September 17, 2020. https://www.theguardian.com/music/2020/sep/17/sault-untitled-rise-review.

⁸² Sault, "Don't Shoot Guns Down." *Untitled (Black Is)*. Forever Living Legends. 2020: 1:04 -1:14.

⁸³ Sharpe, *In the Wake*, 3, 10, 11.

/ We all know it was murder,"⁸⁴ giving voice to the injustice, anger, and pain of Black death at the hands of the police. The song performs griefwork. Yet, this griefwork is situated within a context of Black gathering, resistance, strength, and community "We are dying. It's the reason we are crying ... But we will never show fear / Even in my eyes / I will always rise / in wildfires."⁸⁵

Sault sings of wildfires to indicate the need for "a cleansing, a burning of the country's old ways of governance for something fresh and new" and as a "rebirth: For too long, underserved communities have been forced to abide by rules that don't serve them. No more, though." Sault's use of "wildfire" draws on the most common current use of the word, according to the *OED*: "like wildfire: with immense rapidity and effect; very swiftly and forcibly ... vigorously," or figuratively, "in reference to a destructive agency, or to excited, violent, or fervid feeling or utterance." A rapid cleansing, a vigorous regeneration, a swift rebirth, is needed "in wildfires." Salomón J. also writes of the potential of wildfires – turning to fire's wisdom as a guide for the way colonial systems can be dismantled swiftly through resistance and organizing. Salomón J. writes, "Disaster decolonization is a process of direct action abolition in order to expedite the regeneration of Indigenous, Black, Brown, and colonized land and life ... There is wisdom in fire. There is much in the colonial reality that needs to be burnt down so something healthier can emerge." Fire, as an elemental catalyst of

⁸⁴ Sault, "Wildfires," 0:34 - 1:04.

⁸⁵ Sault, "Wildfires," 1:15 - 1:38.

⁸⁶Moore, Marcus J. "Sault's 'Untitled' Lights Up The Full Spectrum of Blackness," *NPR*. June, 19, 2020. https://www.npr.org/2020/06/19/880336898/review-sault-untitled-black-is-lights-up-the-full-spectrum-of-blackness.

⁸⁷ Sault, "Wildfires," 1:34 - 1:37.

⁸⁸ Salomón J., "Decolonizing the Disaster."

change, bearer of wisdom, and cleansing source of renewal, sparks the possibility of more just and liberatory ways of living on California lands.

Short II

Copper Wire and the Body Electric

"How could that recharge them? Respark them? Life was electricity."

- Rivers Solomon, Sorrowland (2021)

Jean Toomer's extended modernist prose poem, *Cane* (1923), is electrified. The circulation of energy via electricity and its impacts on industrialization, the laborer, race, and art making in the US, wind throughout the piece. Almost exactly in the middle of the work appears the poem "Her Lips Are Copper Wire." "Her Lips Are Copper Wire" is a poetic electrification that, as Jennifer Lieberman describes, "sings the sensuality of copper. The poem reads:

Her Lips Are Copper Wire

whisper of yellow globes gleaming on lamp-posts that sway like bootleg licker drinkers in the fog

and let your breath be moist against me like bright beads on yellow globes

telephone the power-house that the main wires are insulate (her words play softly up and down dewy corridors of billboards)

then with your tongue remove the tape and press your lips to mine till they are incandescent²

¹ Lieberman, *Power Lines*, 212.

² Toomer, Jean. Cane (New York: W. W. Norton & Company, Inc., 2011), 55.

"Her Lips are Copper Wire" alludes to electricity to create an aesthetic of technological innovation and modernity.³ In his body of work, Toomer explores technology's impacts on Black Americans as a route to imaging what innovation has to offer US communities of color. Mark Whalan writes that Toomer was invested in "how technology might allow for a new and potentially liberating vision of racial identity within modern America." More specifically, Whalan explains that

Toomer saw technology as offering a way out of this closed circuit of aesthetics, oppression and violence within the rural South ... Toomer had a freedom to speculate on how technology's twin attributes of power and radical novelty might be useful in reconceptualizing the increasingly inflexible categorization of race within the United States.⁵

One can read "Her Lips Are Copper Wire," as a cognate for "Face," a prose poem that appears earlier in *Cane*. Where "Her Lips Are Copper Wire," describes an electrified cityscape, "Face" paints the personified portrait of an overripe, decaying US south, "nearly ripe for worms." When read as a cognate for "Face," "Her Lips Are Copper Wire," rewrites the US south's

³ Whalan conteds that Toomer "ultimately ... envisaged the production, circulation and transformation of energy by machinery as an important figure for art in two respects. Firstly, it was suitable for conceptualizing the streamlining of the circulation of desire within cultural production, irrespective of racial or political barriers. Secondly, it would serve as an analogue to the transformative energy which underpinned all artistic creativity."

Whalan, Mark. "Jean Toomer, Technology, and Race." *Journal of American Studies* 36.3 (2002): 465.

⁴ Whalan, "Jean Toomer, Technology, and Race," 460.

⁵ Whalan, "Jean Toomer, Technology, and Race," 467.

⁶ Toomer, Cane, 12.

dying history through the energized, capitalist city and Toomer's hopes for electrified modernity take on additional poignant meaning.

In "Her Lips Are Copper Wire," readers find electricity-powered communication technology enabling the voice and expression of the speaker and the "her" of the poem. Whalan and Wesley Beal read this technology-enabled voice against the foil of other racialized figures in the longer prose poem cycle who lack a voice and the ability to speak as a way of emphasizing Toomer's hopes for electricity-powered possibility for Americans of color. One could turn to Toomer's autobiography as a mixed-race person to understand his investment in the inflexible categorization of race in the US, as he did not identify as either White or Black, stating that his multiracial heritage made him "An American, neither white nor black."

"Her Lips Are Copper Wire," has been read as depicting a technologically mediated romance between the speaker and the "her" of the poem. "The woman on the other end of the phone line is part love interest and part personified mechanization: her body is the technology that conveys her voice. While her lips double as the "copper wire" of the phone line itself, she becomes a cyborg." While the copper wire conducting the electrical current is only explicitly named in the poem's title, it acts as a conductor throughout the poem, facilitating the flow of desire and attraction.

In some ways, the "her" of Toomer's poem anticipates Janelle Monae's "Electric Lady"

- whom the song's lyrics describe as "Illuminating all that she touches," and as having

⁷ Toomer, qtd. in Whalan, "Jean Toomer, Technology, and Race," 463.

⁸ Beal, Wesley. *Cane*. "The Form and Politics of Networks in Jean Toomer's 'Cane.' *American Literary History* 24.4 (2012): 666.

⁹ Monáe, Janelle. "Electric Lady [Official Video]." *The Electric Lady*. Bad Boy, Wondaland, Atlantic. 2013: 3:36 - 3:39.

"magnetic energy." Both Toomer and Monáe's electrified women signal the ways electricity shapes talk about sexual pleasure, desire, attraction and connection – "sparks flew," "charged encounters," and "turned on" are all common turns of phrase that draw on electricity to signal flows of connection, attraction, conduction, and seduction. Even electrons, when activated, "incandescent," are described as being excited. As Lieberman writes, Toomer's poem "hints that we have inscribed our desires onto the electrified cityscape. It reciprocally reveals the role that electricity has played in shaping our conceptions of beauty, of city life, of bodies" Toomer and Monáe's electrified women also draw attention to the relationship between gender and energy generation – as both gendered figures generate the current of attraction and desire others feel. It is only by removing the tape and connecting to "her" lips, that the speaker of Toomer's poem also becomes electrified.

The electric body has a long literary genealogy: from Dr. Frankenstein's life-producing shock in Mary Shelley's novel to Walt Whitman singing his "body electric," and from Ray Bradbury's science fictional riff on Whitman to Rivers Solomon's understanding of the figurative spark of life as literal electric current in *Sorrowland* (from which this short takes its epigraph: "How could that recharge them? Respark them? Life was electricity"), sensuality, life force, vitality, and animacy have a complex literary history of being symbolized by electric current.

While I understand Toomer was creatively and aesthetically invested in technology and the potential it offered racialized Americans to break away from the constraints of fixed identity, "Her Lips Are Copper Wire," leads me to think about biological understandings of

¹⁰ Monáe, "Electric Lady [Official Video]," 3:45 - 3:47.

¹¹ Lieberman, *Power Lines*, 212.

the human nervous system as an electrical phenomenon. Within the human body, nerve cells communicate with each other through electrochemical signals – this is an electrical process where an electrical charge travels across a neuron's plasma membrane. Electrical charges make human muscle movement possible – quite literally, in synapse, animating the human body.

A bio-chemical understanding of the human nervous system as a series of electrical phenomena allows for an embodied understanding of energy rather than an extractive one. Eschewing an extractive approach for an embodied one affirms what Native North American scholars and writers have pointed out about Indigenous conceptions of energy that conceive of it as a force that animates all beings (not as a resource commodity to extract). As Laura Harjo, Myskoke scholar of Indigenous futurity, explains:

A Myskoke way of being in the world is animated by energy in all things ... there is spiritual energy in all elements ... our time existing in material form is animated by a transfer of energy among beings, an important grounding concept for understanding the realm of community and all beings that inhabit a community. Energy is exchanged and sensed through interaction, conversations, and contemplation. We build a collective that is built from energy produced together.¹³

Harjo's conception of energy, focused on community self-determination and animacy, brings into being a very different cultural relationship to the concept of energy, human relationality, and the more-than-human world, one that provides the foundation for building collective community through reciprocal, co-produced incandescence.

Diaz, Natalie. Postcolonial Love Poem. Minneapolis: Graywolf Press, 2020.

¹² Harjo, *Spiral to the Stars: Mvskoke Tools of Futurity*. Tucson: University of Arizona Press, 2019.

¹³ Harjo, *Spiral to the Stars*, 55.

Nearly a century after Toomer writes of coppery circuitry conducting desire, Mojave poet Natalie Diaz draws on the sensuality of copper in her poem "exhibits from The American Water Museum." In a section of the poem Diaz has described as "the last love letter written to the last river," he writes, "Like me you are a fast body. A coppery current. I laid in your bed. I kept you for myself except you are myself and kept me instead." Like Harjo's theorizing, Diaz poetically expands the energy of animacy, of being and mattering, beyond the human. Using copper's conduction to help emphasize speed, embodiment, and aliveness, Diaz extends an understanding of the human body outside of the bounded Western subject to include the river and its bed ("I laid in your bed. I kept you for myself except you are myself"). She writes, "I am both – the river and its vessel. It maps me alluvium. A net of moon-colored fish. I ve flashed through it like copper wire" (68). The river is Diaz's body, her current and its current flashing through each other.

How does my understanding of the human change once I acknowledge I produce electrical current?

Lieberman's reading of Toomer's poem provides a kind of answer: "Her Lips Are Copper Wire' eroticizes the liminal, linguistic space where electricity and humanity become indistinguishable."

16

Where else does electricity exist uncontained by the control of the power grid?

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¹⁴ Diaz, *Postcolonial Love Poem*,69.

¹⁵ Diaz, *Postcolonial Love Poem*, 70.

¹⁶ Lieberman, *Power Lines*, 212.

My own body provides a partial answer: The nerve impulse in the human body is like a lightning strike in that both are electrical phenomenon that exist uncontained by the power grid.

My body is an electrical phenomenon.

Your body is an electrical phenomenon.

"No one had asked the water what it wanted": Hydro-imaginaries in Linda Hogan's Solar Storms

"LEAKS"

"dirt road
open windows
beautiful one, too perfect for this world
the immediacy of mosquitoes
humidity choking breath
my beautiful singing bird
five year old ogichidaakwe¹
crying silent, petrified tears in the backseat
until the dam finally bursts

you are the breath over the ice on the lake, you are the one the grandmothers sing to through the rapids, you are the saved seeds of allies, you are the space between embraces

she's always going to remember this

you are rebellion, resistance, re-imagination

her body will remember

you are dug up roads, 27-day standoffs, the foil of industry prospectors

she can't speak about it for a year, which is 1/6 of her life

for every one of your questions there is a story hidden in the skin of the forest, use them as flint, fodder, love songs, medicine. You are from a place of unflinching power, the holder of our stories, the one who speaks up

the chance for spoken up words drowned in ambush you are not a vessel for white settler shame, even if i am the housing that failed you."²

Simpson, Leanne Betasamosake. *Islands of Decolonial Love: Stories & Songs* (Winnipeg: Arbeiter Ring Publishing, 2015), 21.

¹ Leanne Simpson draws attention to and offers translations of the nishanaabemowin (Nishnaabe language) used throughout *Islands of Decolonial Love*. The following translation of ogichidaakwe is included at the bottom of the page "leaks" is published on: "*nishanaabemowin: ogichidaakwe is holy woman*."

² Simpson, *Islands of Decolonial Love*, 21.

This chapter begins by immersing its readers in Nishnaabeg scholar and writer Leanne Betasamosake Simpson's short spoken word poem, "leaks," from her larger multi-media work *Islands of Decolonial Love* (2013). Simpson has explained that "leaks" shares a mother's realization that she cannot protect her young daughter from the violences of ongoing colonialism after her daughter experiences racism.³ Yet, the mother of the poem recognizes that she can mitigate the damage caused by colonial-fueled racism by passing down her connection to the land and pride in being Anishinaabe.⁴

Simpson's "leaks" succinctly introduces several key commitments of Native feminisms. I understand Native feminisms to prioritize knowledge produced by Native women and girls, and to theorize, tell stories, and enact praxis that centers Indigenous peoples and their relationships to the land and water. In the poem's focus on what the body experiences and remembers, it conveys how Native feminisms draws on felt theory and the body as a site of knowledge formation.⁵

It is important to acknowledge that Euro-Western cultural constructions of gender do not easily map onto Indigenous conceptions of gender. To this end, Simpson has written about her identity as a First Nations woman and its relationship to knowledge formation:

I understand the word *kwe* to mean woman within the spectrum of genders in Nishnaabemowin, or the Nishnaabe language. Kwe is not a commodity. Kwe is not capital. It is different than the word *woman* because it recognizes a spectrum of gender

³ Simpson, Leanne Betasamosake and Mumford, Cara. "Leaks music video," 2014. https://vimeo.com/79076989.

⁴ Simpson, "Leaks music video."

⁵ Million, Dian. "Felt Theory: An Indigenous Feminist Approach to Affect and History." *Wicazo Sa Review* 24, no. 2 (2009), pp. 53-76.

expressions ... Kwe does not conform to the rigidity of the colonial gender binary, nor is kwe essentialized. In my mind, kwe has the capacity to be inclusive of both cis and trans experiences ... my life as a kwe within Nishnaabewin is *method* because my people have always generated knowledge through the combination of emotion and intellectual knowledge within the kinetics of our place-based practices, as mitigated through our bodies, minds, and spirits.⁶

Native feminisms theorize the interconnections of white supremacy, settler colonialism, and global capitalisms, and are committed to decolonial theory and practice.⁷ The poem's italics impart methods for cultivating Indigenous sovereignty,⁸ survivance,⁹ and futurity,¹⁰ passing

⁶ Simpson, Leanne Betasamosake. *As We Have Always Done: Indigenous Freedom through Radical Resistance* (Minneapolis: University of Minnesota Press, 2020), 29.

Vizenor, Gerald. "Aesthetics of Survivance." In *Survivance: Narratives of Native Presence*. Edited by Gerald Vizenor (Lincoln: University of Nebraska Press, 2008), 1.

⁷ Aikau, Hokulani K.; Arvin, Maile; Goeman, Mishuana; and Morgensen, Scott. "Indigenous Feminisms Roundtable." *Frontiers: A Journal of Women Studies* 36.3 (2015): 99.

⁸ For a helpful definition of sovereignty, and the ways that Indigenous conceptions of sovereignty differ from Euro-Western ones, see Mvskoke scholar of Indigenous futurities Laura Harjo's discussion of sovereignty in *Spiral to the Stars*. Building off Indigenous scholar Scott Richard Lyons' definition of sovereignty as "nothing less than our attempt to survive and flourish as a people," Harjo theorizes that Indigenous sovereignty differs from Euro-Western ideas about self-governance in that it is grounded in the community. She writes that "radical sovereignty does not have to wait for the nation-state to recognize it or deem it legitimate. Instead, it is embodied ... and practiced without permission from anyone" (Harjo, *Spiral to the stars*, 49-50).

⁹ Anishinaabe scholar Gerald Vizenor coined the influential concept of survivance. He defines Native survivance as "an active sense of presence over absence, deracination, and oblivion; survivance is the continuance of stories, not a mere reaction, however pertinent ... Survivance stories are renunciations of dominance, detractions, obtrusions, the unbearable sentiments of tragedy, and the legacy of victimry." Vizenor reminds that "survivance" is a legal term that establishes heritable legacy.

¹⁰ Harjo describes Indigenous futurity as follows: "The notion of futurity challenges a conventional reckoning of time and the future, and pushes us to create right now – in the present moment – that which our ancestors, we, and future relatives desire" (Harjo, *Spiral to the Stars*,

them down to the next generation and into the future. The acts of "speaking up," and "standing off" in order to foil industry prospectors and defend traditional relationships with the land refuse ongoing colonialism and provide the flint and fodder for re-imagining the world.

Simpson's poem also articulates the central importance of stories as makers of Native culture. "leaks" shows that Native stories are a source of power, medicine, love, and healing. Stories provide tools for rebellion. Seneca feminist geographer Mishuana Goeman maintains that "Native narratives mediate and refute colonial organizing of land, bodies, and social and political landscapes." By theorizing Native feminisms through Simpson's poem, I aim to demonstrate that, as Athabascan scholar Dian Million maintains, "story *is* Indigenous theory." Narratives," Million writes, "serve the same function as any theory, in that they are practical vision."

Through its poetic imagery, "leaks" calls into being an animate world full of human and more-than-human relations, one where grandmothers sing through watery rapids, and love and kinship swirl with the foggy breath rising from an icy lake. The web of relations Simpson poetically speaks into being link different watery bodies, including lakes, running rapids, and the human body: the child's tears flow into the rapid river, which streams into the lake, freezes

^{4).} And, further, that "Futurity is an action; it's a practice ... Futurity is a practice that invokes our ancestors' and relatives' unactivated possibilities in our present lived moment, and it imagines future possibilities. Even possibilities we thought were gone or extinguished can be revived in the imaginary embodied by futurity" (Harjo, *Spiral to the Stars*, 34).

¹¹ Goeman, Mishuana. *Mark my Words: Native Women Mapping Our Nations* (Minneapolis: University of Minnesota Press, 2013), 3.

¹² Million, Dian. "There Is a River in Me: Theory from Life." *Theorizing Native Studies* (Durham: Duke University Press, 2014), 35.

¹³ Million, There Is a River in Me," 35.

into ice, and evaporates into breathy fog. Through its choice of title and use of the language of liquidity, the poem reveals a watery, porous world, full of leaks.

This chapter is submerged in the rising waters of Chickasaw author Linda Hogan's *Solar Storms* (1994) – a fictionalized account of Indigenous resistance to the massive James Bay hydroelectric project. For centuries, colonists in the Americas have harnessed water's energy by damming free flowing rivers, whether to create a grist mill, or the James Bay project. Massive hydroelectric dams, like the James Bay project, concretize nation state authority, and are examples of the way the power grid is in a part/whole contiguous relationship with the nation state, colonial power, and capitalist extraction. Like in Simpson's poem "leaks," readers of *Solar Storms* are greeted by a world that is saturated – with the violence of ongoing colonialism and Indigenous resistance to its matrix of power, but also with animacy, kinship, and water. Solar Storms conjures for readers a world where energy is not a resource to be extracted, but a force that animates all life.

The use of dams to harness the energy of water's movement has a long history that predates the generation of hydroelectricity and the power grid, dating back to at least the third century BC when the ancient Greeks used water mills to turn grindstones. ¹⁴ Dams are one of the earliest examples of energy infrastructure, designed to extract energy as a resource from the waters of the living Earth. Dams are central to settler colonist land and water relations on Turtle Island. Historical accounts report that when new groups of settlers arrived in America, the first two major structures they built were a church and a dam. ¹⁵ "The dams plugged streams

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¹⁴ Pain, Stephanie. "Power through the ages." *Nature*. November 29, 2017. https://www.nature.com/articles/d41586-017-07506-z.

¹⁵ Lieb, Anna. "The Undamming of America." *Nova*. August 12, 2015. https://www.pbs.org/wgbh/nova/article/dam-removals/.

and set them to work, turning gears to grind corn, saw lumber, and carve shingles." ¹⁶ Dams have been also the focus of a long history of Indigenous land and water defense: "During King Phillip's War in 1676, the Wampanoag tribe attacked colonist's dams and millhouses, recognizing that without them, settlers could not eat or put roofs over their heads." ¹⁷ This chapter turns to Hogan's fictional depiction of land and water defense against the James Bay Hydroelectric Project in her novel *Solar Storms* to show the impossibility of truly controlling water's circulation, flow, and constant movement ¹⁸ – to show that lands and waters always exceed the Western colonial urge to turn them into extractable commodity resources.

Hogan is the Writer in Residence for the Chickasaw Nation. ¹⁹ She is the second Native American author – after N. Scott Momaday became the first in 1969 for his novel *House Made of Dawn* – to be nominated for the Pulitzer Prize in 1991 for her novel *Mean Spirit. Mean Spirit* is a polyvocal murder mystery set in the 1920s which recounts the Oklahoma Oil boom's impacts on the Osage nation. *Mean Spirit* demonstrates Hogan's interest in the impacts of settler colonialism-fueled energy extraction on Indigenous communities. *Solar Storms*, Hogan's next novel, published in 1995, continues to develop these interests, this time taking up the story of the James Bay Hydroelectric project. Hogan's literary interests and body of work contextualize how *Solar Storm's* firmly situates hydroelectricity within systems of

¹⁶ Lieb, "The Undamming of America."

¹⁷ Lieb, "The undamming of America."

¹⁸ As Janine MacLeod observes water has "long been regarded as a place of uncertainty and risk; it can be navigated more or less bravely, but never controlled" (MacLeod, *Thinking with Water*, 57).

¹⁹ Hogan, Linda. Website. https://www.lindahoganwriter.com/.

extraction and environmental devastation. *Solar Storms* intervenes in ongoing settler colonial perspectives that conceive of megadam-generated hydropower as a renewable resource.

Hogan's perspective of hydroelectricity as just as extractive as drilling for oil is mirrored in other Indigenous cultural production. The short film, "We are in Crisis," created by Cannupa Hanska (Mandan, Hidatsa, Arikara and Lakota) and the artist collective Winter Count as an offering to Standing Rock water protectors, the land, and the water, is comprised entirely of aerial footage overlaid with voiceover narration:

I want to tell you a story. A being was born out of the anxiety of separation. It is a fearful creature that we have nourished. We nursed it: oil, and iron, and blood. Let it feast upon our battlefields. It grew powerful in the shadows of our wars, and it learned to crawl aided by combustion engines. The beast became cunning and started a revolution of industry. Its arms grew and reached out of the killing fields, where its belly remained, and found refuge in all of our homes.²⁰

The first shot of the film travels toward a series of oil wells, while the narrator states "a being was born ..." In the shot, the extractive infrastructure has been painted the same color as the dry grasses, a failed attempt at camouflage, as the wells easily and ominously rise above the rippling grasses surrounding them. The wells sit upon bare earth, cleared of vegetation, red and moist like a wound. Industrial effluent pools near the wells, undulating in the breeze, mirror the large expanse of steely bluegrey water behind the hill the oil infrastructure sits atop.

As the narrative progresses, the aerial footage moves away from the oil field, following the linear cut of railroad tracks. Here, the narrator tells of the beasts crawling, aided by

²⁰ Luger, Cannupa Hanska, Dylan Mclaughlin, Ginger Dunnill, Merritt Johnson and Nicholas Galanin. "We are In Crisis." https://vimeo.com/187762675.

combustion engines. The camera pauses at the intersection of electrical power lines and railroad tracks where a grid forms. The camera then skips away from the tracks and follows the electrical transmission lines to a concrete hydroelectric dam.

In all of these shots, the aerial vantage of the camera is able to capture the violence of energy infrastructure, oil and electrical alike – of its extraction and controlling linearity – highlighted by its juxtaposition with the organic shapes of rolling hills, grasses, watery shores. The film challenges the military-industrial worldview of the Dakota Access Pipeline project – the extractive cultural imaginary that uses energy infrastructure to reshape the environment as property and resource. The film politicizes energy infrastructure, asking viewers to consider the cultural imaginary that built US energy systems. Infrastructure is not a passive backdrop in in the film, instead viewers are asked to think about it as the beast of industry and capital, born from separation with the living Earth, and nourished on blood, oil, and water.

Solar Storms and "We are in Crisis" represent megadam development and its subsequent largescale transformation of lands and waters as a process of deterritorialization — one that purposely disrupts Indigenous land relations through dispossession, and in the process, creates colonial ecologies. The deterritorialization of megadams is achieved through the transformation of Indigenous lands and waters into colonial ecologies in a process that severs Native relations to place, undermines Indigenous sovereignties, and interrupts Indigenous place-based epistemologies.

I use the framework of "colonial ecologies" to draw attention to the ways that settler colonialism actively contours North America's environments. Colonial ecologies are naturalcultural. They exist because of colonial land relations even though they are also, in seeming paradox, places that have been naturalized in the settler environmental imaginary –

places such as National Parks, dam-created reservoirs like Lake Powell used for recreation and power generation, Niagara Falls state park, etc., are all illustrative examples of colonial ecologies. Their creation is a result of settler cultural and political relationships to the land even though their developmental or extractive origin stories are not an acknowledged as part of their settler environmental imaginary.

In practice, colonial ecologies are one of the ways that settler colonialism perpetuates itself into the future. The creation of colonial ecologies requires the literal flooding of valleys, movement of mountains, and extraction of Turtle Islands' lands and waters – they symbolize the ways settler regimes intend their occupation to extend indefinitely into the future. As such, Indigenous acts of land and water protection, like those fictionalized in *Solar Storms* and encouraged by the mother/speaker of Simpson's poem, resist this process while also embodying and enacting a radical form of self-determining sovereignty in the face of displacement. My reading of the representation of hydroelectric damming in *Solar Storms* metonymically connects the novel with other sites and imaginaries where dams have disrupted, dislocated, and deterritorialized. Throughout this chapter, I work to connect *Solar Storms* with other dammed environments, such as the Colorado and Klamath Rivers, to better understand the impacts of dams on Indigenous cultural production and Native place-based relationships to lands and waters.

THE JAMES BAY HYDROELECTRIC PROJECT

While striving to maintain a readerly balancing act that acknowledges the literary and imaginative possibilities of *Solar Storms* fictional engagement with the James Bay Hydroelectric Project, I also begin with the observation that the novel is grounded in the lands

and waters of the James Bay region. I read this grounding as metonymic: the novel is part of the James Bay region, and in turn, the region is part of the novel. Laura Virginia Castor opens her article on *Solar Storms* by spatially and environmentally orienting her reader with a textured description of James Bay. I am inspired by her description of and decision to introduce the region's lands and waters and have drawn on her essay to do the same.²¹

Located on the southern end of the Hudson Bay, James Bay makes up the southernmost part of the Arctic Ocean. It consists of mostly shallow, marshy, tidal flats, where salt and freshwater meet. Both the Hudson Bay and James Bay freeze in the winter. The eastern shore of James Bay is largely composed of hilly boreal forest, the western by tundra lowlands. The Cree have inhabited the shores of James Bay for thousands of years.

In 1970, Québec Province launched plans for the Hydro-Québec project to dam three major rivers that flow into James Bay, initiating what is now known as Phase I of the James Bay Hydroelectric Project. Phase I of the James Bay Hydroelectric Project diverted the Eastmain, Opinaca, and Caniapiscau Rivers to dammed reservoirs along the La Grande Riviere. These diversions increased the La Grande's average flow from 1,700 to 3,300 cubic meters per second. As part of this first phase, three power stations were built along the La Grande, and a massive, tiered spillway was blasted out of the bedrock – the spillway is an

²¹ Castor, Laura Virginia. "Claiming Place in Wor(l)ds: Linda Hogan's *Solar Storms*." *Melus*. 31.2 (2006): 157.

Goeman, Mishuana. "Ongoing Storms and Struggles: Gendered Violence and Resource Exploitation." *Critically Sovereign: Indigenous Gender, Sexuality, and Feminist Studies*. Durham: Duke University Press, 2017.

Castor, "Claiming Place in Wor(1)ds: Linda Hogan's Solar Storms," 157.

²² Hydroelectric development in Cree territory began decades earlier, in the 1940s. Marsh, James H. and Erin James-abra. "James Bay Project." *The Canadian Encyclopedia*, 2015.

²³ Marsh and James-abra, "James Bay Project" and Goeman, "Ongoing Storms and Struggles."

example of the gigantic scale of this project, as it is three times the height of Niagara Falls.²⁴ The first phase 1 station built remains the largest power-generating site of any energy source in North America.²⁵

Work on phase I of the James Bay Hydroelectric Project was undertaken in 1971 on unceded Cree lands, ²⁶ without consultation with, or permission from, the Cree and Inuit. ²⁷ Acknowledging that the lands and waters which the James Bay Hydroelectric Project is built upon were never surrendered interrupts linear narratives of progress that rely on colonial fantasies of terra nullius, which in turn feed progressive versions of history that imagine the colonial development of Indigenous lands as inevitable. While the Cree never surrendered sovereign rights to their territory, development proceeded because the Canadian government "claimed that water as a 'common property resource,' provides for the needs of all Canadians, and that this claim overrides First Nations claims to the lands" (emphasis added).²⁸ The government's formulation of water as "common property" for "all Canadians" exposes the limits of Western environmental theorizing about the commons and raises pointed questions such as: Who counts as Canadian? Who benefits from the Canadian commons and who is dispossessed by its creation? The James Bay Hydroelectric Project would eventually flood 11,500 square kilometers of Cree and Inuit land and kill an estimated 10,000 caribou²⁹ – important more-than-human relatives and sustainers of Indigenous lifeways in the north.

²⁴ Marsh and James-abra, "James Bay Project" and Goeman, "Ongoing Storms and Struggles."

²⁵ Marsh and James-abra, "James Bay Project" and Goeman, "Ongoing Storms and Struggles."

²⁶ Castor, "Claiming Place in Wor(l)ds: Linda Hogan's Solar Storms," 157.

²⁷ Marsh and James-abra, "James Bay Project" and Goeman, "Ongoing Storms and Struggles."

²⁸ Castor, "Claiming Place in Wor(l)ds: Linda Hogan's Solar Storms," 157.

²⁹ Marsh and James-abra, "James Bay Project" and Goeman, "Ongoing Storms and Struggles."

Furthermore, the reservoirs created methylmercury contamination when mercury was released from the rotting vegetation in them.³⁰ The mercury contamination moved up the foodchain and entered the region's fisheries, which were, and are, central to traditional Cree foodways. The impacts of the James Bay Hydroelectric Project exemplify how the environment is a site where colonial violence is enacted; the different scales and temporalities of this environmental violence; and, the ways these spectacular instances of colonial environmental engineering extend into the future.



Figure 1. 1973 photograph from the James Bay Ethnographic Resource Digital Archives. Photograph by George Legrady.

³⁰ Marsh and James-abra, "James Bay Project" and Goeman, "Ongoing Storms and Struggles."

As the slogan on the tee shirt worn in George Legrady's 1973 portrait (Figure 1 above) illustrates, the James Bay Hydroelectric Project was met with organized Indigenous resistance. Legally, the Cree and Inuit sought an injunction from the Superior Court of Québec, which was granted in 1972, suspending work on the project until prior agreement from the Cree and Inuit was gained. However, construction continued a week later as the Québec Court of Appeals suspended the injunction on grounds that public interest takes precedence over the interests of a minority. This formulation, of Indigenous people as minorities, participates in the same logic as the hydro-project's original frame as part of a greater Canadian commons. This logic justifies sacrificing Indigenous lifeways for the greater good of the colonial nation state and is an example of how colonial settler logics structure legal proceedings. Framing First Nations communities as minorities undermines Native nationhood, ignores tens of thousands of years of North American history where First Nations peoples were the majority of people living on Turtle Island, and justifies the colonial present – making it seem inevitable through a dismissive reduction of history.

Sites of extraction and energy generation, like the James Bay Hydroelectric Project, power the project of colonial nationhood and make settler lifeways on stolen lands and waters possible. Max Haiven, in his essay "The Damned of the Earth," asserts that dams are central to nation building projects because dams are "concretizations of authority." He describes dams as

³¹ Marsh and James-abra, "James Bay Project."

³² Marsh and James-abra, "James Bay Project."

³³ Haiven, Max. "The Dammed of the Earth: Reading the Mega-Dam for the Political Unconscious of Globalization," *Thinking with Water*, edited by Chen, Cecilia, Janine MacLeod, and Astrida Neimanis (Montreal: McGill-Queen's University Press, 2013), 214.

key sites in the renegotiation of nature and nation; dams [are] presented as evidence of industry, providence, and ingenuity. In them, massive public investment and privatized proficiency came together not merely as make-work infrastructure projects but as massive and shared symbols that represen[t] ... modern conquest.³⁴

Dams become sites where nationhood and national identity are reproduced – where the power of the nation state is mythologized and concretized. Dams are (hydro)electrified metonyms for the harnessing of nature by capitalist industry, shoring up state-sanctioned colonial might and authority.

Construction began on phase II of the James Bay Hydroelectric Project in the late 1980s, but was only partially completed due to organized and strategic Cree opposition.³⁵ A large part of this strategy included lobbying across the border, in the US.³⁶ The James Bay Hydroelectric project created more electricity than Québec could use.³⁷ This excess electricity was sold to the northeastern US states of New York, New Hampshire, Maine, and Vermont.³⁸ In this instance, the power grid as an infrastructure of energy transfer and electrical transportation, fuels the co-constitutive colonial powers of Canada and the United States. Eventually, the Cree's lobbying was successful: in 1992, the then-governor of New York directed the New York Power Authority to cancel its contract with Hydro-Québec.³⁹ Due to

³⁴ Haiven, "The Damned of the Earth," 214-215.

³⁵ Marsh and James-abra, "James Bay Project" and Goeman, "Ongoing Storms and Struggles."

³⁶ Marsh and James-abra, "James Bay Project" and Goeman, "Ongoing Storms and Struggles."

³⁷ Marsh and James-abra, "James Bay Project" and Goeman, "Ongoing Storms and Struggles."

³⁸ Marsh and James-abra, "James Bay Project" and Goeman, "Ongoing Storms and Struggles."

³⁹ Marsh and James-abra, "James Bay Project."

the lack of a market for its hydropower, completion of Phase II was suspended indefinitely. 40 Ultimately, despite Indigenous intervention, Phase I and Phase II dammed nine-free flowing rivers and flooded an area the size of Belgium. 41

Hydroelectricity's easy flow across national borders illuminates both the power grid as an infrastructure of energy transfer and the co-constituting colonial history of the Canadian and US settler states. Niagara Falls, the site of one of the earliest hydroelectric dams in North America, is another place where colonial power is produced through the harnessing of hydropower. Niagara Falls is a foundational example of the ways dams, and the hydroelectrified power grid, make meaning. Niagara Falls shapes the infrastructural materiality of electrification in North America as electricity generated at the falls powered Buffalo, New York and the surrounding area's industrialization; influenced the design of other hydroelectric dams throughout the twentieth century; and in its fueling of Northeast industrialization, demonstrates the lasting environmental, cultural, and industrial impacts of hydroelectricity.⁴² Hydroelectric surplus, like that transported to the US Northeast from the James Bay project, that which was generated at Niagara Falls and was used to power Buffalo, and that which was produced on the Susquehanna River, where a 1926 dam created so much power that a network of wires were erected to sell the electricity further afield, planted "the seed[s] of the electricity grid as we know it."43

⁴⁰ Marsh and James-abra, "James Bay Project."

⁴¹ Marsh and James-abra, "James Bay Project."

⁴² As one conceptual touchpoint for Niagara Falls's great influence on the cultural imaginary about hydroelectricity, I drew on it in comparison to the James Bay spillbay in an attempt to communicate the scale and scope of the James Bay project.

⁴³ Martin Doyle, qtd in Lieb, "The Undamming of America."



Figure 2. Ontario Power Company Generating Station at Niagara Falls. The station was decommissioned in 1999, and is now a Canadian Cultural Heritage Site. Photo licensed under the creative commons.

Goeman, in "Electric Lights, Tourist Sights: Gendering Dispossession and Colonial Infrastructure at the Niagara Falls Border," writes that "for the United States and Canada, the Niagara Falls site ideologically marks the recognition of co-constitutive settler powers, where might over right wins out in the extraction of resources." The damming and diversion of the Niagara River resulted in the first treaty dealing with the distribution of hydroelectric power

⁴⁴ Goeman, Mishuana, "Electric Lights, Tourist Sights: Gendering Dispossession and Colonial Infrastructure at the Niagara Falls Border." In *Indian Cities: Histories of Indigenous Urbanization*, edited by Kent Blansett, Cathleen D. Cahill, and Andrew Needham (Norman: University of Oklahoma Press, 2022), 96.

between the US and Canada and, as Goeman observes, "reveals a pattern: the placement of hydroelectric dams and other energy generation plants on Native lands throughout the twentieth century." Goeman's observation reveals the role the power grid plays in the historical and ongoing colonization of Turtle Island. Goeman recognizes Niagara Falls as a "site of biopolitical power in which American and Canadian settlers come to know themselves by ... sacrificing [Indigenous] Haudenosaunee histories, land, water and meanings of place."

In the same vein as Haiven, Goeman's work on hydroelectricity conceives of hydroelectric dams as "state-produced space," and as "monuments." Goeman writes that monument making conveys "the message of a united peoples; it does memory work." As Figure 2 illustrates, even decommissioned hydroelectric sites, like the Ontario Power Company Generating Station at Niagara Falls pictured above, remain on the land as monuments to Canadian colonial engineering and industry – the Ontario Niagara Falls generating station is now a Canadian Cultural Heritage Site. Marking the decommissioned hydroelectric station as a cultural heritage site exemplifies the way dams do memory work in service of the state. Dams, as monuments to the authority of capitalist industry and colonial might, do memory work that narrativizes the transformation of Indigenous environments and places, naturalizing the colonial ecologies they create and the dispossession they require. Of the lasting violence of megadam development, Goeman observes that "the environmental, geographic, and

⁴⁵ Goeman, "Electric Lights and Settler Sights," 96.

⁴⁶ Goeman, "Electric Lights, Tourist Sights."

Madarieta, Ethan. "Mishuana Goeman: 'Electric Lights, Tourist Sights: Gendering Dispossession and Colonial Infrastructure at the Niagara Falls Border' – Response by Ethan Madarieta." *Unit for Criticism & Interpretive Theory*, 2016.

⁴⁷ Goeman, "Electric Lights and Settler Sights," 98.

⁴⁸ Goeman, "Electric Lights and Settler Sights," 97.

molecular scars remain as a testament to the violent reality that the settler-state intends occupation to be a never-ending condition."⁴⁹ The power grid is one of the environmental and geographic scars that grew up from sites of hydroelectric dam development.

SOLAR STORMS

Stories are not crafted, told, nor interpreted in a vacuum. Set at the climax of Cree and Inuit land and water protection in opposition to the James Bay hydroelectric project, this is the historical context *Solar Storms* fictively engages. I share this history not to laminate *Solar Storms*' literary world onto the material/natural world in a move that forecloses the novel's imaginative possibilities, but instead to demonstrate the ways that *Solar Storms* is an historically sourced novel and, like all cultural production, is relational and capacious. Laura Virginia Castor also grapples with the relationship between Hogan's literary fiction and history in her essay. She writes that "even though Hogan's characters, events, and the fictional geography of the novel bear striking resemblances to James Bay, a disclaimer on the copyright page states: 'this is a work of fiction' ... How then is it possible for the reader to connect the world of an imaginative text to the world of lived experience in a meaningful way?" ⁵⁰ Castor suggests that:

the narrative power of Solar Storms lies in its ability to create a sense of empathy among characters, between the narrator and the landscape, and between the narrator and the reader. The role of empathy in Hogan's novel is not only to persuade her reader to enter

⁴⁹ Goeman, "Electric Lights, Tourist Sights" and Madarieta, "Mishuana Goeman: 'Electric Lights, Tourist Sights: Gendering Dispossession and Colonial Infrastructure at the Niagara Falls Border' – Response by Ethan Madarieta."

⁵⁰ Castor, "Claiming Place in Wor(l)ds: Linda Hogan's Solar Storms," 158-159.

her imaginative world, but, more importantly, it is a politicized strategy of influencing her reader's attitudes and understanding of the ways in which indigenous people's rights are connected to the survival of the planet.⁵¹

I take issue with Castor's imaginary of *Solar Storms* readership in the quote above, as I worry she formulates them as predominantly non-Indigenous. I suspect her assessment that Hogan's political work lies in influencing her readers hinges on an assumption that the novel's readership are not Indigenous, which I think potentially plays into the larger White and colonial history of literary studies and literacy in North America. That said, her emphasis on land and place, particularly her emphasis on relationality and empathy with the land as both key to reading the novel and to survivability, align with my own reading of *Solar Storms*. The novel's narrative power does indeed lie in its ability to create empathy with the landscape and more-than-human world.

Solar Storms opens with its main character and narrator, Angel, journeying from Oklahoma back to the fictional town of Adam's Rib in the Northern US, along the Canadian border, to reconnect with her extended kin including her great-grandmother Agnes Iron and adopted mother/grandmother Bush. Of her return journey, Angel thinks, "A secret part of me knew this ... was ... a beginning ... that I was traveling toward myself." Forcibly removed from her extended family by child protective services, Angel spent twelve years moving between foster homes.

Set in the 1970s, *Solar Storms* takes much of the preceding decades of Native history as its narrative backdrop. Angel and her community follow the American Indian Movement's

⁵¹ Castor, "Claiming Place in Wor(l)ds: Linda Hogan's *Solar Storms*," 158-159.

⁵² Hogan, Linda. *Solar Storms* (New York: Scribner, 1995), 26.

(AIM) organizing for Native American Civil Rights and self-determination. AIM acts as inspiration and model for enacting radical sovereignty and self-determination throughout the novel, particularly AIM's focus on reoccupation of lands and waters in the face of twentieth-century colonial policies of erasure and termination. As Angel observes,

the American Indian Movement was gaining momentum in cities. We'd heard a little about the goings-on in Wounded Knee, but we were hungry for more information. We wanted to see and hear more from the young men with braids. They sounded strong as warriors to us. Many of the people in the room admired them, even the older ones, and some had already taken to letting their hair grow and wearing it, once again, in growing-out braids.⁵³

Angel and her community are inspired by AIM. The movement becomes one model for reimagining the world and cultivating the kind of sovereignty, survivance, and futurity – born from "speaking up" and "standing off" as is encouraged by Simpson's poem "leaks," – that is needed to protect the James Bay region from the massive hydroelectric development.

Another example of twentieth century Indigenous history that informs the novel's narrative is the Indian Adoption Project (IAP). Though not explicitly referenced in the novel, the IAP forms the legal scaffolding for Angel's childhood removal from her family. The IAP, active from the 1950s to the late 1970s, resulted in 25-35% of Native children in the US being adopted out of their communities and placed in Euro-American homes.⁵⁴ The decades of the

⁵³ Hogan, Solar Storms, 156.

⁵⁴ "The outplacement and adoption of indigenous children," *Britannica*. https://www.britannica.com/topic/Native-American/The-outplacement-and-adoption-of-indigenous-children#ref970072.

IAP are now sometimes referred to as the "adoption era."⁵⁵ Survivors of outplacement understand it to be an era of genocide and removal, ⁵⁶ comparing it to the boarding/residential school era in the US and Canada – a form of institutionalized colonial assimilation aimed at violently rupturing Indigenous cultural traditions by removing Native children from their families and communities.

Indigenous child welfare and its relationship to tribal sovereignty and colonialism is an ongoing issue. At the time of writing this chapter (February 2022), the US Supreme Court has agreed to hear a challenge to the constitutionality of the Indian Child Welfare Act of 1978, which was originally passed to address the problems of the IAP and make it more difficult to remove Native American children from their families and tribes. While the influence of the Indian Child Welfare Act is complicated as Native children still face disproportionately high rates of removal, it was designed to ensure that adoption solutions keep Native children within their tribal communities. And, it has become the gold standard that other adoption policies and practices emulate.

Three US states – Texas, Louisiana, and Indiana, have sued the US federal government to challenge the law, claiming that it discriminates against potential adoptive families based on race. In defense of the Indian Child Welfare Act of 1978, the Cherokee and Navajo Nations (two of the largest Native nations in what is now known as the US) have responded explaining

⁵⁵ Woodward, Stephanie, "Native American Expose the Adoption Era and Repair its Devastation: A story about the harmful effects of the Indian Adoption Project," *Indian Country Today*, September 13, 2018, https://indiancountrytoday.com/archive/native-americans-expose-the-adoption-era-and-repair-its-devastation.

⁵⁶ The United Nations (UN) definition of genocide includes: "forcibly transferring children of the group to another group."

UN, Office on Genocide Prevention and the Responsibility to Protect, "Definitions: Genocide." https://www.un.org/en/genocideprevention/genocide.shtml.

that "the states' race-discrimination argument is inflammatory. The 1978 law is 'tied to membership in Indian tribes – which is about politics, not race." Troublingly, the US Supreme Court hearing of the states' challenge could also set precedent for eroding the sovereignty of Native nations in regards to casino rights and rights to lands and waters. ⁵⁷

When explaining how the US colonial nation state justified the theft of Indigenous children from their tribal nations and communities, the *Brittanica* entry for "The outplacement and adoption of Indigenous children," outlines Euro-American "ethnocentric criteria."58 Examples of ethnocentric criteria include the imposition of the heterosexual nuclear family onto the complex and extended kin networks of Indigenous communities (one of the many facets of how colonization operates through gender- and sexuality-based violence). Terry Cross of the Seneca Nation, executive director of the National Indian Child Welfare Association, states that

In the 1950s, 1960s and 1970s, children were removed from Indian families because auntie was taking care of them, and the system called that neglect. But it was simply a different cultural way of meeting the child's needs. To this day, social workers who remove Native children don't know what an Indian family is and what supports are available in the extended family and tribe.⁵⁹

The issues of adoption, found family, and kin beyond blood ties are personal for Hogan, who adopted her two daughters. You can read about Hogan's experience as an adoptive mother in

⁵⁹ Woodward, "Native Americans Expose the Adoption Era and Repair Its Devastation."

⁵⁷ Liptak, Adam. "Supreme Court to Hear Challenge to Law on Adopting Native American Children," The New York Times, February, 28, 2022. https://www.nytimes.com/2022/02/28/us/supreme-court-native-american-children.html.

⁵⁸ "The outplacement and adoption of indigenous children," *Britannica*.

her memoir *The Woman Who Watches Over the World. Solar Storms* is dedicated to Hogan's granddaughter. When visiting UCSB as part of a writer's residency organized by the UCSB American Indian and Indigenous Collective (AIIC), Hogan explained that she wrote *Solar Storms* when her granddaughter was taken from her custody by child services. She has since been reunited with her granddaughter. Writing *Solar Storms* helped her through the experience. Knowing Hogan's biography, Bush's character as a non-blood related mother/grandmother figure takes on personal meaning, and the book itself can be read as a kind of love story to lost children, nurturing hope for reunion.

In the years preceding *Solar Storm's* opening, Angel is removed from Bush's care, as well as the care of the extended network of kin that make up her community in the north. *Solar Storms* recounts Angel's coming-of-age story while she learns about Native lifeways, forms relationships with the more-than-human environment of her ancestral homelands, and reconnects with a complicated web of extended family – including Agnes, Agnes's Mother and Angel's great-great-grandmother Dora Rouge, and Angel's grandfather's ex-wife Bush, who regains her past place as an adopted mother figure for Angel.

The life Angel finds in the watery north with her grandmothers and extended kin, however, is threatened by the construction of the James Bay hydroelectric project. The project is already underway by the time Angel and her community learn about it from two young Indigenous men traveling south by canoe to warn others about the construction, its unfolding environmental impacts, and to gather allies in their fight against the dam. If the next step of construction proceeds, Angel's newfound home at Adam's Rib will be flooded.

The novel never explicitly addresses the town's name. While "Adam's Rib" is obviously a biblical allusion, the novel resists uncomplicated and uncontested Christian

allegories. Angel remains critical of Christianity throughout the narrative. Early in the novel, she recounts a story of Christian missionaries "killing" the healing waters on Fur Island, where Bush lives, by blasting where they bubbled forth with dynamite. Angel reasons, "Because of the killing of the waters, the Indians who journeyed there for healing let Christianity pass them by; they didn't want a god that made them sick and took away the remedy." ⁶⁰ Still later, Angel offers her own take on spirituality, sharing that "I know now that the name [God] does not refer to any deity, but means simply to call out and pray, to summon. To use words and sing, to speak ... I came later to understand that God was everything beneath my feet, everything surrounded by water; it was in the air, and there was no such thing as empty space." ⁶¹ Further differentiating her own spirituality from a Christian understanding of a patriarchal, monotheistic God, Angel thinks to herself that "Dora-Rouge, who insisted she was born new every day, was the closest thing to God. And I was partly made in the old woman's image, right down to the owl-beak nose and dark, curved brows, and when she spoke the days of creation, I believed in them." 62 Reading the name of Dora-Rouge and Agnes's town, Adam's Rib, through Angel's own meditations on God, it seems that the narrative employs Christian symbolism – the novel's narrator is named Angel—yet, it refracts, distorts, and reimagines it as a way of drawing on familiar iconography while radically altering it. Adam's Rib, said to be the thing that give's life to Eve (and thus all women), can be read as a fitting name for the homeplace of Solar Storm's matrifocal narrative. The novel spatializes "Adam's Rib,"

⁶⁰ Hogan, Solar Storms, 66.

⁶¹ Hogan, Solar Storms, 169-170.

⁶² Hogan, Solar Storms, 182.

introducing the everyday, yet still deeply spiritual act, of ongoing creation, deeply tying creation, and human life, to the lands and waters.

Angel's return, and the reconnections (to lands, waters, community, and traditions) it engenders, are threatened by the James Bay Hydroelectric Project. Upon hearing of the dam development, Angel, Bush, Agnes, and Dora Rouge hatch a plan to travel north and join a growing community of Indigenous and allied land and water protectors opposing the dam. "For my people," Angel explains, "the problem has always been this: that the only possibility of survival has been resistance. Not to strike back has meant certain loss and death. To strike back has also meant loss and death, only with a fighting chance." As they plot and plan, the roads north are blocked to keep people from joining the growing opposition to the dam. Circumventing the surveilled and blockaded roads, the women decide to travel by water, embarking on a season-long canoe journey north.

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⁶³ Hogan, Solar Storms, 325.



Figure 3. Photograph taken in Eastmaine, Québec in the summer of 1973, shot from inside of a canoe, looking at the prow, with another canoe in the background. Photograph by George Legrady. Part of the James Bay Ethnographic Resource Digital Archives.

Angel understands the power grid to be an infrastructure of control and colonial hydropower projects, like the ones constructed at James Bay, as a reduction of water's possibilities – objectifying and commodifying water as a resource to be extracted in order to harvest its power. When listening to a radio while doing chores shortly after electrification from the new hydroelectric construction reaches her family's home, Angel muses to herself,

I thought of how the speed of light travels, light from the sun, even the light on the face of the radio. I had never before thought of the radio as a miraculous invention, that a crystal from the earth pulled voices out of air and distance, but now that [we] had electricity, I listened to the radio and was forced to consider also the speed of certain

kinds of darkness, because it was darkness that traveled toward us. It was a darkness of words and ideas, wants and desires ... Part of the fast-moving darkness was the desire of those who wanted to conquer the land, the water, the rivers that kept running away from them. It was their desire to guide the waters, narrow them down into the thin black electrical wires that traversed the world. They wanted to control water, the rise and fall of it, the direction of its ancient life. They wanted its power.⁶⁴

Angel's understanding of the radio as "from the earth" denies Euro-Western environmental thought, which seeks, through its dichotomous approach to nature and culture, to sever people and technology from the environment. Her linking of electrification and darkness also plays with metonymic conceptions of electricity that reveal its contiguous relationship with lights and the energetic work it performs when illuminating, inverting electrification's close association with illumination. Angel's conception of electricity as a harbinger of darkness ("darkness of ideas, wants and desires"), imbricates the energetic, material, and infrastructural aspects of electrification with the cultural, political, ideological, and symbolic.

Electrification symbolizes the imposition of colonial worldmaking on Indigenous communities and did act as a harbinger of certain kinds of darkness, as lack of access to electricity and other infrastructural amenities was often used to justify the theft of Indigenous children through out-adoption. One major aspect of Euro-American ethnocentric criteria on the outplacement of Indigenous children is the prioritization of access to electricity:

Material comforts linked to infrastructure were simply not available on reservations as early as in other rural areas. For instance, while US rural electrification programs had ensured that 90 percent of farms had electricity by 1950 – a tremendous rise compared

⁶⁴ Hogan, Solar Storms, 268.

with the 10 percent that had electricity in 1935 – census data indicated that the number of homes with access to electricity did not approach 90 percent on reservations until 2000. These kinds of cultural and material divergences from Euro-American expectations instantly made native families appear to be backward and neglectful of their children. As a direct result of these and other ethnocentric criteria, disproportionate numbers of indigenous children were removed from their homes by social workers.⁶⁵

The social worker's ethnocentric criteria relied on the electrification that linked electricity and progress, imagining access to electricity as a prerequisite for participation in US modernity. This electrification was used to justify the theft of Indigenous children from their families and communities because the story it tells is that without electricity is "backward and neglectful."

 $^{^{65}}$ "The outplacement and adoption of indigenous children," Britannica.



Figure 4. These Hydro-Québec V-guyed towers and power lines carry electricity generated from the James Bay Hydroelectric Project to load centers in southern Québec, 1,000 km away. Photo licensed under the creative commons.

Angel's above reflection – on electricity and the developers' "desire to guide the waters, narrow them down into the thin black electrical wires that traversed the world. They wanted to control water, the rise and fall of it, the direction of its ancient life. They wanted its power" – ends with an acknowledgement of the multiple meanings of power – collapsing the different meanings of power, including its reference to energetic work and its relationship to sociocultural power and authority. Goeman has also noted the multiple ways the word power

⁶⁶ Hogan, Solar Storms, 268.

signifies, writing that the hydroelectric harnessing of Niagara Falls "mark(s) the struggle for power – both literally and figuratively."⁶⁷ The power grid's "thin black electrical wires," narrow, control and contain water's movement. The photograph of Hydro-Québec's V-guyed towers and power lines carry electricity generated from the James Bay Hydroelectric Project (Figure 4 above) provides a visual metonym of the narrowing and control Angel reflects upon. Reducing water's life force to a source of hydro-power generation is part of colonial worldmaking – and enforces a single relationship to water. This relationship dams free flowing rivers to make reservoirs for energy storage – reducing bodies of water to largescale batteries. Yet, other relationships to energy and water exist. Mojave poet Natalie Diaz writes that "energy is a moving river, moving my moving body."⁶⁸

Solar Storm's Angel opens her reflection on the changes wrought by electricity by ruminating on the speed of electricity – "I thought of how the speed of light travels" – observing electricity's ability to collapse the relationship between space and time as it connects disparate locations quickly, which is visualized in figure 4's image of the "thin black electrical wires that traversed the world." ⁶⁹ In his foundational work of Native Studies, God Is Red, Dakota scholar and activist Vine Deloria Jr. contends that one of the incompatible differences between Indigenous epistemologies and Western/Euro-American worldviews is the centrality of the land to Indigenous relationships and meaning making: "American Indians hold their lands – places – as having the highest possible meaning, and all their statements are made with

⁶⁷ Goeman, "Electric Lights, Tourist Sights," 97.

⁶⁸ Diaz, Postcolonial love Poems, 48.

⁶⁹ Hogan, Solar Storms, 268.

this reference point in mind."⁷⁰ Whereas, Euro-American epistemologies prioritize the historical and developmental, thereby deriving meaning from the world in relation to time – giving development and linear progress central importance.⁷¹

In *Solar Storms* the dams are justified through a techno-developmental worldview, the cultural and epistemological differences between prioritizing place versus time playing out in the dam developers' responses to the land and water defenders. In a meeting, the developers call Angel and her community "remnants of the past" asserting that the construction will bring them "into the twentieth century." In response, Angel thinks to herself, "To the white men who were new here, we were people who had no history, who lived surrounded by what they saw as nothingness." Angel's response is critical of the dynamic created by the developers, and in it, she sets herself and her community in opposition to the White men and their newness and ignorance, questioning their understanding of history. The narrative perpetuated by the developers frames Indigenous people as trapped in the past, outside of modernity, just as the social worker's ethnocentric electrifiction does. This narrative perpetuates colonial and racialized stereotypes, while imposing Western epistemology as a violent monocultural universal. *Solar Storm's* is a critical response to this narrative, of Indigenous people as left out

⁷⁰ Deloria Jr., Vine. *God is Red: A Native View of Religion* (New York: The Putnam Publishing Group, 1973), 61.

⁷¹ Deloria Jr., *God is Red*, 61.

Coulthard, Glen. "From Wards of the State to Subjects of Recognition? Marx, Indigenous Peoples, and the Politics of Dispossession in Denendeh." *Theorizing Native Studies* (Durham: Duke University Press, 2014): 69-70.

⁷² Hogan, Solar Storms, 280.

⁷³ Hogan, Solar Storms, 280.

of modernity – instead it tells the story of strategic opposition, of refusal and selfdetermination.

Reorienting readers to the watery world of the novel's opening chapter, Angel shares her impressions of Adam's Rib: "It was the north country, the place where water was broken apart by land, land split open by water so that the maps showed places both bound and, if you knew the way in, boundless." These boundless bodies of water not only provide Angel, Bush, Agnes, and Dora Rouge with a route north, they also give rise to an embodied relationship with water that transforms Angel. An example of Angel's developing relationship with her ancestral lands and waters are her plant dreams. As the novel progresses, and Angel is immersed in the boundless waters of the north, she begins to have dreams of medicinal plants, some of which she has never before seen in person. These dreams further connect her to the living Earth and the nonhuman life it supports. Learning to navigate the watery north, Angel emerges from this trip with her grandmothers irrevocably changed, deeply connected to the natural seasons and cycles of where she now lives.

Angel's boundless understanding of the watery region subverts Western cartographies and reveals how US, Canadian, and Mexican borders are imposed constructs from colonial nation states that do not account for the cultural exchange, ecological knowledge, community-making, traditional land bases, or relations of Indigenous nations throughout the Americas. Positioning the novel along the borderlands between Canada and the US, Hogan disrupts normative colonial understandings of mapmaking, citizenship, political control, and the nation state. Subverting the terrestrial bias of Western cartographies, Angel conceives of her homeland as a boundless region of interconnected bodies of water.

In Solar Storms, water repeatedly acts as a metaphor for life and self. When Angel metaphorizes her move back to Adam's Rib and subsequent journey of self-discovery, she realizes that her return "was a felt thing, that I was traveling toward myself like rain falling into a lake."⁷⁴ Metaphor connects human life and culture to the natural world and makes the expression of animacy in the novel possible. Anishinaabe scholar Gerald Vizenor theorizes that the use of metaphor in Native North American storytelling is one of the mechanisms by which Native storytelling is an act of survivance. Quoting George Lakoff and Mark Johnson's Metaphors We Live By (1980), Vizenor theorizes that, "Metaphor is one of our most important tools for trying to comprehend partially what cannot be comprehended totally: our feelings, aesthetic experiences, moral practices, and spiritual awareness. These endeavors of the imagination are not devoid of rationality; since they use metaphor, they employ an imaginative rationality."⁷⁵ Metaphor, then, becomes one way in which Indigenous epistemologies, lifeways, and relations can begin to be translated into and through English, despite English being a language based on nouns. ⁷⁶ Nouns work to objectify/thingify the places and things that are not considered people. This objectification of lands, waters, and nonhuman beings denies their aliveness, movement, becoming, and meaning making, while recentering the human as the only noun-based category granted personhood. Further connecting metaphor to survivance, Vizenor writes,

Kimmerer, Robin. Braiding Sweetgrass (Minneapolis: Milkweed Editions, 2013), 53.

⁷⁴ Hogan, *Solar Storms*, 26.

⁷⁵ Lakoff and Johnson qtd. in Vizenor, "Aesthetics of Survivance," 13.

⁷⁶ Potawatomi scholar Robin Kimmerer observes that "English is a noun-based language, somehow appropriate to a culture so obsessed with things. Only 30 percent of English words are verbs, but in Potawatomi that proportion is 70 percent."

Metaphors create a sense of presence by imagination and natural reason, the very character and practice of survivance. The critical interpretation of native figurations is a theory of irony and survivance. The studies of oratory and translation, figuration, and native diplomatic strategies are clearly literary and historical, text and context, and subject to theoretical interpretations.⁷⁷

Its use of metaphor is one of the ways *Solar Storms* is able to communicate animacy⁷⁸ – the meaning and mattering of more-than-human beings and the living Earth, while also reconnecting the human to the complicated web of life it is but one part of.

A significant moment of animacy and aliveness in the novel, and one of my favorite parts of the narrative, occurs during chapter fourteen, a single-page chapter which is only two paragraphs long. In the second paragraph, Angel's narrative perspective begins to fade away

Interestingly, in most English language dictionaries, including Merriam-Webster's and the Oxford English Dictionary (oed), the word animacy does not appear, though the related adjective animate does. The related senses of animate (ppl., adj., n.) found in the *oed*—ofwhich only the adjective remains contemporary—are denoted as having the following Latin etymology: "ad. L. animātus filled with life, also, disposed, inclined, f. animāre to breathe, to quicken; f. anima air, breath, life, soul, mind." As an adjective, animate means "endowed with life, living, alive"; "lively, having the full activity of life"; "pertaining to what is endowed with life; connected to animals"; and "denoting living beings." Animus, on the other hand, derives from the Latin, meaning "(1) soul, (2) mind, (3) mental impulse, disposition, passion" and is defined as "actuating feeling, disposition in a particular direction, animating spirit or temper, usually of a hostile character; hence, animosity." We might find in this lexical soup some tentative significations pertaining to materialization, negativity, passion, liveness, and a possible trace of quickened breath. Between these two, animate and animus, is a richly affective territory of mediation between life and death, positivity and negativity, impulse and substance; it might be where we could imagine the territory of animacy to reside.

Chen, Mel Y. *Animacies: Biopolitics, Racial Mattering, and Queer Affect* (Durham: Duke University Press, 2012), 3.

⁷⁷ Vizenor, "Aesthetics of Survivance," 13.

⁷⁸ Mel Y. Chen notes that:

for the first and only time in the novel, and the narration centers the living Earth, its agency, aliveness, and animacy. It reads:

And in time it would be angry land. It would try to put an end to the plans for dams and drowned rivers. An ice jam at the Riel River would break loose and rage over the ground, tearing out dams and bridges, the construction all broken by the blue, cold roaring of ice no one was able to control. Then would come a flood of unplanned proportions that would suddenly rise up as high as the steering wheels of their machines. The Indian people would be happy with the damage, with the fact that water would do what it wanted and in its own way. What water didn't accomplish, they would. ⁷⁹

Here, in this literary moment, water's uncontrollability, its power and force, are imbued with agency, emotion, and intention, writing into being a world where water, as a living animate being, desires and angers and resists.

Using water's constant movement, continuous flow, and regular phase change to metaphorize life is taken up in other Native feminist poetics (a practice undivided from theory). For example, Million interrupts her academic style of writing with an unnamed poem in her essay "There is a River in Me: Theory from Life," The river informs both the content and form of Million's poem. The poem becomes a winding river of serpentine eddies in the midst of Million's more linear theory-making. Explaining this stylistic and structural interruption, she writes that "Rivers generally formed the lifeblood of where I came from, and so I offer rivers as an apt suggestive metaphor for life force and my desire and will to life." Going on to

⁷⁹ Hogan, Solar Storms, 224.

⁸⁰ Million, "There Is a River in Me," 41.

metaphorize the interconnected and related experiences of being Native as a body of water, Million describes the stories that connect these experiences as an "archipelago;" illustrating the ways that stories provide a connected chain in the watery currents of life.

Water is not merely a metaphor for life and self in the world of Hogan's novel, water is carried in the human body, moves through the human. "A human is alive water,"82 Angel thinks to herself at the end of the book. Human beings here, are reconceptualized both as in intimate relation with water and as an animate vessel for water. "Tears have a purpose," Angel theorizes, "They are what we carry of ocean, and perhaps we must become sea, give ourselves to it, if we are to be transformed."83 Angel's reconceptualization of the human body as a body of water is echoed across Native North American cosmologies. Mohawk Midwife, Katsi Cook shares the traditional teaching that "the waters of our bloodstream and the waters of the earth are all the same water."84 Lenape scholar Jack Forbes explains that "our bodies included more than simply our arms, legs, head, and trunk. It is certainly true that we can lose part of our "flesh" and go on living, but we cannot lose the air, the sun, the animals, the plants, or pure water. These gifts are not simply added to us, they are the core of our flesh. We are made of these things."85 Mirroring Angel, Forbes also reorients toward the boundless, contending that "We are, indeed, bodies without borders." Including the same teaching as Forbes in her poem "The first water is the body," Diaz unpacks it, writing that "We think of our bodies as being

⁸¹ Million, "There Is a River in Me," 31.

⁸² Hogan, Solar Storms, 350.

⁸³ Hogan, Solar Storms, 340.

⁸⁴Cook, Katsi. "Women are the First Environment." *Indian Country Today*, September 12, 2018. https://indiancountrytoday.com/archive/cook-women-are-the-first-environment.

⁸⁵ Forbes, Jack. "Where do our bodies end?" Windspeaker Publication 19.10 (2002).

all that we are: *I am my body*. This thinking / helps us disrespect water, air, land, one another. But water is not external / from our body, our self ... the water we drink, like the air we breathe, is not a part of our body but is our body. What we do to one – to the body, to the water – we do to the other."86

Diaz, in her grief over the colonially-induced drought conditions of the Colorado River, also writes of tears:

When Mojaves say the word for tears, we return to our word for river, as / if our river were flowing from our eyes. A great weeping is how you might / translate it. Or a river of grief. But who is this translation for and will they come to my language's four - / night funeral to grieve what has been lost in my efforts at translation? / When they have drunk dry my river will they join the mourning procession across / our bleached desert?⁸⁷

While *Solar Storms* submerges readers in the floodwaters of the James Bay Hydroelectric Project, dam-caused deterritorialization is not always experienced through rising floodwaters. Dam building can also result in parched drought, creating, instead of a submerged world, what Diaz describes as "the territory of thirst." ⁸⁸ What insights become possible when drought and flooding are not conceived of as dichotomous, but as shared colonial ecologies sutured by dam development and its subsequent dispossession? How does an understanding of Turtle Island's watery relations change when the ache of thirst is read side by side with the slow rise of floodwaters?

88 Diaz, Postcolonial Love Poem, 70.

⁸⁶ Diaz, *Postcolonial Love Poems*, 51-52.

⁸⁷ Diaz, *Postcolonial Love Poem*, 47.

Dam-caused deterritorialization links the flooding caused by North America's largest power generation site with the "most endangered river in the United States" – the Colorado River. Diaz's poems from her collection *Postcolonial Love Poem* parch readers, inviting them into "the territory of thirst" created by the damming and overuse of the Colorado River. The speaker of Diaz's poem "The First Water is the Body" worries about what will happen to her when the water that she is made up of, that runs through her, is drunk dry from colonial mismanagement and overuse:

"If I was created to hold the Colorado River, to carry its rushing inside me, if the very shape of my throat, of my thighs is for wetness, how can I say who I am if the river is gone?

What does 'Aha Makav mean if the river is emptied to the skeleton of its fish and the miniature sand dunes of its dry silten beds?

if the river is a ghost, am I?

Unsoothable thirst is one type of haunting."90

In her poem, Diaz formulates dam displacement as "one type of haunting," and the violent process of losing her body of water as the desiccation that produces skeletons and ghosts.

In "The First Water is the Body," Diaz writes, "The Colorado River is the most endangered river in the United States -- / also, it is a part of my body. / I carry a river. It is who I am: 'Aha Makav. This is not metaphor." While Hogan and Vizenor use metaphor's imaginative possibility as a tool for imbuing a static, objectified world with animacy and

⁸⁹ Diaz, *Postcolonial Love Poem, 46.*

⁹⁰ Diaz, *Postcolonial Love Poem, 50.*

⁹¹ Diaz, *Postcolonial Love Poems*, 46.

energy as a means of Indigenous survivance through story, Diaz explicitly rejects metaphor because of its reliance on comparison – the transportation of ideas and symbols through dynamic equation. Diaz means, literally, that the river is part of her body – the transportation metaphor requires does not account for the part/whole relationship between Diaz and the Colorado River. In a second poem from the collection, "exhibits from the American Water Museum," she turns to the contiguity of metonymy in an attempt to translate her relationship with the Colorado River for her readers:

Metonymic Experience:

There are more than 60,000 miles of waterways in our bodies – veins, arteries – the red lines of our own lives. We are topographies of sustainable greed – *dragons be here now*, in our bellies, in the cracked bowl bottoms of lakebeds, bloodshot eyes frayed like red speaker wires scorched in the sun. We thirst. Our thirst is a caravan – pilgrims of scarcity. As we die of drought, we splay in the shifting sand like old maps to follow, ones that led us here to begin with, brought us to this masterpiece of thirst, as architects and social practice artists. The curators ask us to collapse as naturally as possible, in a heap – so those who come behind us might be immersed in this exhibit of thirst, as if it were their own.

92 Diaz, Postcolonial Love Poems, 66-67.

Diaz's metonymic experience draws on the spatiality, materiality, and contiguity of metonymy, sketching a portrait of the human as but one part of a larger system of waterways. Diaz's poetry, Simpson's "leaks," and Hogan's novel all attempt to translate into and through English how the human body of water and its relationship to other human and nonhuman bodies of water is a metonymic relation, that of a part to a whole.

One of the reasons I return to *Solar Storms* again and again, is the way the novel's depictions of water evoke the (now familiar) Standing Rock rallying cry that "Water is life." Nick Estes, citizen of the Lower Brule Sioux Tribe and Standing Rock Water Protector, notes that the phrase "Mni Wiconi – 'water is life' – is also an affirmation that water is alive. Hunkpapa historian Josephine Waggoner suggested that the word mni (water) is a combination of the words mi (meaning "I") and ni (meaning "being"), indicating that it also contains life." In *Solar Storms*, water is alive – a more-than-human relation imbued with energy, movement, desire, and knowledge. Writing Angel's relationship with water into being, Hogan pens that Angel's "mind drifted off to water, to wetness itself, and how I'd wanted so often to hold my breath and remain inside the water that springs from earth and rains down from the sky. Perhaps it would tell me, speak to me, show me a way around these troubles. Water, I knew, had its own needs, its own speaking and desires. No one had asked the water what it wanted."

⁹³ Estes, Nick. *Our History is the Future: Standing Rock Versus the Dakota Access Pipeline, and the Long Tradition of Indigenous Resistance* (London: Verso, 2019), 15.

⁹⁴ Hogan, Solar Storms, 279.



Figure 5. 1973 photograph from a boat trip near the town of Fort George, Québec at the mouth of the La Grande. Fort George was relocated in 1980 due to impacts caused by the James Bay Hydroelectric Project. Photograph by George Legrady. Part of the James Bay Ethnographic Resource Digital Archives.

Arriving in Adam's Rib, Angel does not know how to swim. This slowly changes, as she responds to her newfound watery world, learning from Bush and from the swimming animals she encounters. Swimming becomes a way for Angel to physically, mentally, and emotionally navigate the changing world she finds herself part of -- and it allows her to submerge herself in the floodwaters covering her homelands. Submersion becomes a method, both metaphorical and physical, for navigating the rising waters caused by the hydroelectric construction. For example, Angel recounts entering a near-Arctic lake:

In spite of water's hungry desire and its cold temperature, I entered the near-back lake and immersed myself. My skin tightened ... Inside it, naked and alone, I held my breath past my own limit. I saw my body as from a distance; it was an unwavering flame in the dark room of water, a wick of warmth holding fire in a cold chill, holding light in the vast, immense darkness. I floated in what wanted freedom, in what white men wanted changed.⁹⁵

Despite water altering Angel's life and land, she does not allow her relationship to it to be shaped by dichotomy – the damned, rerouted, and altered water does not become "unnatural" because it has been changed, it remains part of the living Earth. Readers come to realize, through Angel's submersion, that the water's freedom and the freedom of Angel's people are entangled. When colonial forces threaten the water with unfreedom, they also threaten Angel's community.

Macarena Gómez-Barris theorizes that a submerged perspective allows "us to see local knowledge that resides within what power has constituted as extractive zones ... *submerged perspectives* pierce through the entanglements of power to differently organize the meanings of social and political life. In other words, the possibility of decolonization moves within ... submerged perspectives." Angel's submerged perspective provides the possibility, even after damming, for her to continue to conceive of herself as an embodiment of water, to understand water as still alive, still a relation.

95 Hogan, Solar Storms, 229.

⁹⁶ Gómez-Barris, *The Extractive Zone*, 11.



Figure 6. Color photo from George Legrady's visit to Fort George Town, titled "Canoes docked on the beach in front of houses in the distance. This is a historical photograph taken during Legrady's photography trip in the 1970s. Fort George Town was located on Fort George island in the mouth of the La Grande. Due to dam construction (as part of the James Bay Hydroelectric Project), the La Grande's flow and ice cover changed. In 1980, the town voted to relocate from the island to the riverbank. Photograph by George Legrady. Part of the James Bay Ethnographic Resource Digital Archives.

The landscape and town of Fort George, depicted in George Legrady's photographs no longer exist as such. Located in the mouth of the La Grande Riviere, the town was relocated after the James Bay hydroelectric development on the river, which caused the river's currents to become unpredictable and the banks of the town's island home to dangerously erode. The

photographs in the *James Bay Ethnographic Resource Digital Archives* placed throughout this chapter (figures 1, 3, and 5-7), most taken in the 1970s, act as visual metonyms for the altered lands and waters, providing a form of visual memory depicting the haunting images of landscapes that no longer exist. Fort George Town, while no longer inhabited, is not underwater, its island structures abandoned for the security of the river's bank and the town of Chisasibi. Commenting on Fort George Town after visiting its remains, Alanah Heffez writes, "I had always thought that Fort George was underwater ... But on a recent trip up North I learned that, for the moment at least, the remains of the abandoned Fort George are still standing." Like the haunting of Diaz's river, Fort George's remains haunt the landscape. Yet, despite the town's dam-caused dislocation, the island continues to matter to Cree traditional lifeways. "Each summer," Heffez explains, "people from Chisasibi and beyond continue to gather on Fort George Island for *Mamoweedow*, a celebration of the traditional Cree way of life. Many also return to visit the actual graves of passed relatives in the old cemetery." 98

In "Before Dispossession, or Surviving It," Angie Morell, Eve Tuck and the Super Future Haunt Qollective, write of dispossession as a process that creates ghosts and hauntings. They ask,

If dispossession produces ghosts, are those ghosts to be possessed only by dispossession? Nation means nothing to the afterlives of the after-nation. Nation means nothing even to ghosts who haunt as a form of justice, and ghosts who haunt justice as revenge. I am preparing my future haunting. A haunting born and unmoored from

⁹⁷ Heffez, Alanah. "The Lost Village of Fort George," *Spacing Montreal*, September 27, 2008, http://spacing.ca/montreal/2008/09/27/the-lost-village-of-fort-george/.

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⁹⁸ Heffez, "The Lost Village of Fort George."

horror, before and beyond dispossession. A stateless and constant form of passage. A passage that is always passing. A shady sort of sovereignty."⁹⁹

The goal, Morill, Tuck, and the Super Futures Haunt Qollective identify is not repossession, not haunting, but mattering: "the opposite, the endgame of opposing our dispossession is not possession – not haunting, though I'll do it if I have to; it is mattering." I conceive of haunting as akin to porosity. Both are inherent conditions of electrified modernity, both are simultaneously violent and provide potential. Neither are the endgame.

CONCLUSION

Currently, more than more than 47,000 large dams already choke, reroute, and fracture more than 60 percent of the earth's rivers and have displaced approximately eighty million people worldwide. ¹⁰¹ If the people whose lives have been impacted beyond immediate displacement were also counted, such as those whose traditional and/or land-based agricultural or fisheries foodways were disrupted, then the number would be much higher. ¹⁰² Thousands more large dams are being planned or built globally. ¹⁰³ As climate change intensifies and the need for renewable sources of power increases, many countries are turning to hydroelectricity's

⁹⁹ Morrill, Angie and Eve Tuck and the Super Futures Haunt Qollective, "Before Dispossession, or Surviving It," *Liminalities: A Journal of Performance Studies*, 12.1 (2016): 6-7.

¹⁰⁰ Morrill, Tuck and the Super Futures Haunt Qollective, "Before Dispossession, or Surviving It," 5.

¹⁰¹ Villalobos, Victor. "Megadam: 'Obsolete Technology' Wreaks Havoc across the Americas," resilience.org, October 25, 2019, https://www.resilience.org/stories/2019-10-25/megadam-obsolete-technology-wreaks-havoc-across-the-americas.

¹⁰² Villalobos, "Megadam: 'Obsolete Technology' Wreaks Havoc across the Americas."

¹⁰³ Reality Check Team, "Hydropower Dams: What's behind the Global Boom?," BBC, August 6, 2018, https://www.bbc.com/news/world-45019893.

low carbon generation as part of their energy solutions. However, conceiving of climate change as solely an emissions issue fails to address the unjust cultural, political, colonial, and economic power relations that both contribute to climate change¹⁰⁴ and forge megadam development.

Resistance to megadam displacement connects disparate sites and struggles from across the globe, including James Bay and the Colorado River, but also the Sardar Sarovar reservoir, the Yangtze River, and the Akosombo dam. In all of these sites, hydroelectric dams become mythologized as part of nation state authority, whether in decades of independence after external colonization or as part of ongoing colonial regimes. Linking different dammed sites globally traces a map of the different states of (post)coloniality inhabited by the world's Indigenous communities.

Solar Storms forces readers to grapple with the consequences of settler land management practices and pushes them to critique the colonial environmental studies concept of "renewable resources." Massive Hydroelectric projects are considered "renewable" by the US Energy Information Administration and the US Department of Energy's Office of Energy Efficiency & Renewable Energy – despite the fact that the lands and waters that mega-dams flood are not renewable, nor are the human and more-than-human lives they disrupt and displace. Approaching the environment as a series of resources to be managed denies the interconnected web of relations of which humans are a part. Furthermore, conceiving of timber

¹⁰⁴ As Potawatomi scholar of Indigenous environmental justice Whyte writes, "climate change is an intensification of environmental change imposed on Indigenous peoples by colonialism" (Indigenous Climate Change Studies: Indigenizing Futures, Decolonizing the Anthropocene," 153).

For more on the interconnected systems contributing to climate change, read the Center for Interdisciplinary Environmental Justice's (CIEJ) essay "No Comemos Baterías."

and water as renewable helps justify environmental commodification which reduces morethan-human life to purchasable property and extractable resources and makes invisible the irrevocable impacts of extraction, whether through large dam development or clearcutting.

I also think we see settler colonial cultural relationships to the environment, as shaped by the imaginary of "renewable resources," at play in which acts of Indigenous land protection garner widespread media attention and enter the colonial environmental imaginary. Land and water defense against pipelines, such the Standing Rock #nodapl movement and the ongoing land and water protection against Enbridge's line 3, loom large in progressive settler environmental imaginaries because they feed into the urgency of climate change and the very real need for carbon emissions reduction. One way this played out at Standing Rock is that water protectors had to repeatedly remind nonnative allies that #nodapl was not an environmental issue, but a matter of Indigenous sovereignty. Acts of land protection against oil pipelines are part of a larger constellation of land and water defense playing out across Turtle Island, including O'odham water protection against border militarization and development in the southwest and anti-logging forest defense at the Fairy Creek Blockade on South Vancouver Island. The Chumash, on whose unceded traditional lands and water I currently reside, are actively engaged in forest defense against logging on Mt. Pinos and Pine Mountain/Reyes Peak led by a youth-organized direct action coalition Seeds to Forest Defense. 105 Despite the felt impacts of deforestation and ongoing drought, these enactments of land protection do not garner the same levels of nonnative allyship. The fight for Indigenous

¹⁰⁵ For more information about Seeds to Forest Defense and their land protection, visit their Instagram account: https://www.instagram.com/seedstoforestdefense/?hl=en.

sovereignty and decolonization does not fit neatly into Western environmentalist narratives, ¹⁰⁶ instead requiring a fundamental rethinking of colonial cultural relationships to the environment.

Sovereign acts of Native land defense, Estes writes, are a "constant tunneling, plotting, planning, harvesting, remembering, and conspiring for freedom -- the collective faith that another world is possible." In these moments of resistance the future is redefined, led away from linear development and back toward the land, to the place-based and the reciprocal. The stakes of Angel and her community's struggle to protect the North's lands and waters are many: balance, reciprocity, freedom, and ultimately, survival. Angel theorizes a re-indigenized, decolonial future through water's liberatory potential:

On quiet nights at one of the construction sites with a temporary stay of noise and earth moving, we sat before the fire, our eyes shining in the firelight, thinking about our own worlds, how we had come to this through history, how there'd been a prophecy that we would unite and become like an ocean made up of many rivers. Even though we were

¹⁰⁶ For more on how environmental justice in an Indigenous context is wrapped up in issues of sovereignty and self-determination, how Western environmentalism can work to further colonization, and the need for decolonial environmental justice, see Dina Gilio-Whitaker (Colville Confederated Tribes descendant), Hoover (Micmac and Mohawk), Max Liboiron (Michif and settler), and Whyte (Potawatomi).

Liboiron, Max. *Pollution is Colonialism* (Durham: Duke University Press, 2021), 22-27.

Whyte, Kyle. "White Allies, Let's Be Honest About Decolonization: I want to experience the solidarity of allied actions that refuse fantastical narrates of commonality and hope," Yes! Magazine, April 3, 2018, https://www.yesmagazine.org/issue/decolonize/2018/04/03/white-allies-lets-be-honest-about-decolonization.

Gilio-Whitaker, Dina. As Long As Grass Grows: The Indigenous Fight for Environmental Justice, from Colonization to Standing Rock. Boston: Beacon Press, 2019.

Hoover, *The River Is in Us*, especially 7-14.

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¹⁰⁷ Estes, *Our History is the Future*, 19.

afraid, it was a full feeling. We thought maybe this was our time. We believed in what we were doing, and like the others, I felt hope that we would succeed, that we would be able to protect the earth and her people. On those nights the evening light turned rosy and a cloud or two rose up from water.¹⁰⁸

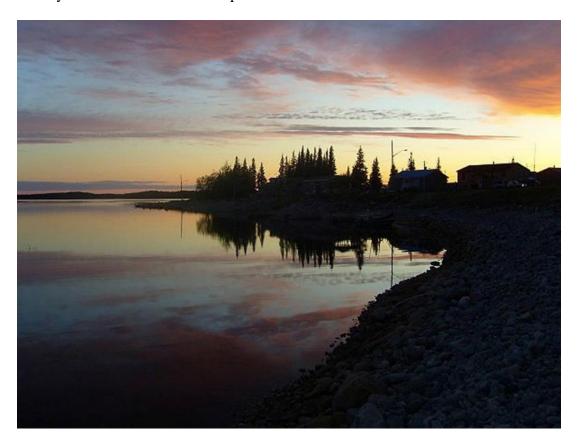


Figure 7. Historic photograph of Wemindji, Québec. Water at sunset. Photograph by Beverly Mayappo. Part of the James Bay Ethnographic Resource Digital Archives.

What might a decolonized environment look like? How might one find a path toward re-Indigenized land relations? In the face of displacement, how can the seeds of an Indigenous future be planted where Native people and their land relations matter, as Morrill, Tuck, and the

¹⁰⁸ Hogan, Solar Storms, 300.

Super Future Haunt Qollective urge ("the opposite, the endgame of opposing our dispossession is not possession – not haunting, though I'll do it if I have to; it is mattering")? In *Solar Storms*, relations with fish and water provide such a path, one that works against the transformative dispossession of the dams. In the midst of the escalating confrontation between land and water protectors and industry, *Solar Storms* gives readers a glimpse of the possible future the land protectors are defending. Angel's Auntie speaks up at the meeting with developers:

You've already built a road across the spawning grounds of the whitefish. They'll die from that road. You did it without our permission." What she didn't say, and what none of us knew yet, was that there were young men outside who ... were taking apart the road, shovelful by shovelful, opening the way for the fish to journey toward the future."

Shovelful by shovelful, the water protectors enact the future they desire in the present – a future that includes spawning whitefish in watery relation.

Métis/otipemisiw scholar Zoe Todd theorizes how the colonial state can be "refracted" through Indigenous human-fish relations in order to enact survivance. Writing about fishy relations and knowledge formation in what is now known as Canada, Todd urges readers, "to consider that a land without fish is one that will not only leave us physically bereft, but also intellectually and spiritually bereft as well. We need to consider how our responsibilities to

¹⁰⁹ Hogan, Solar Storms, 281.

Honoring the reciprocal responsibilities of fish-human relations, Todd concludes, "can teach us to sustain these worlds, here, in lasting and tender ways. And oh, what worlds I hope we leave for the next generation of curious and ferocious grandchildren as we re-imagine our very existence and our very place, here. Now."

Todd, Zoe. "Refracting the State Through Human-Fish Relations; Fishing, Indigenous Legal Orders and Colonialism in North/Western Canada," *Decolonization: Indigeneity, Education & Society*, 7.1 (2018): 75.

fish are integral to the act of survivance."¹¹¹ Considering these responsibilities, and "turning our attention to treating fish as kin and more-than-human persons we have reciprocal duties to," Todd affirms, "is a necessary step in re-orienting our relationships to land, waters, space, stories, and time in light of the ongoing colonial imperatives."¹¹²

Fish relations connect the fictional resistance and self-determination of Angel's community with other sites and locations where honoring watery relations with fish are also leading efforts for dam removal, renewed Indigenous land and water-based sovereignty, and more-than-human legal recognitions of personhood, such as along the Klamath River. The Klamath River flows from a collection of lakes in the foothills of the Cascade Mountain Range, near what is now the Oregon and California state border. Winding its way southwest, the Klamath River flows through Northern California, passing through a series of five dams, before reaching the Pacific Ocean. The Klamath River has been home to the Yurok, Karuk, Hoopa, Shasta, and Klamath Indigenous peoples for millennia, and is also home to chinook and coho salmon, steelhead and coastal cutthroat trout, green and white sturgeon, and Pacific lamprey. The annual salmon runs have been sustainably fished for thousands of years and their cultural and spiritual significance far outweigh their food benefits for the river's Yurok human relations.

Today, more than 350 miles of what was once salmon and steelhead habitat are inaccessible as a result of a system of Klamath River dams and their subsequent reservoirs. Echoing Goeman and Haiven, Ivy Huwald describes the Klamath's series of dams as "Imposing [themselves] onto the landscape ... represent[ing] a shift from fishing for

¹¹¹ Todd, "Refracting the State Through Human-Fish Relations," 73.

¹¹² Todd, "Refracting the State Through Human-Fish Relations," 74.

sustenance to harnessing the energy and water from dams to redirect them in ways that support a complex, extractive means of commercializing the entire agricultural, fishing, and energy industry." The Klamath dams have resulted in toxic algae blooms and the proliferation of harmful parasites. For example, the 2002 Klamath River fish kill, which resulted in the death of more than 68,000 fish returning to spawn, was caused by an explosive growth of parasites after water levels dropped due to the diversion of water for farmers and the river's obstructed flows because of its dams. The Klamath River salmon run used to be the third largest in the US, but now is only about eight percent of its historic levels. As a result, the Klamath is now at the center of a fight to remove its dams and unobstruct – free – the river's flow. Following through with the removal project would make the Klamath home to the largest dam removal project in history. The ongoing efforts to undam the Klamath River are one way of materially and legally enacting a fishy future.

Throughout, this chapter has offered methods of immersion, including analytical immersion in sites of dammed waters, readerly immersion in the language of leaky liquidity, and the embodied immersion of Angel's swimming, as a way of experiencing literary and material worlds beyond the colonial gaze and the extractive view. 114 Methods of immersion and submersion, as Gómez-Barris attests, make it possible to perceive "life otherwise." 115 Returning to Simpson's "leaks" and reading it through *Solar Storms*, both show readers that water's circulation may, for a time, be harnessed, but that it can never be fully controlled. Its aliveness and animacy exceed colonial efforts to commodify it as a resource. The leakiness of

¹¹³ Huwald, Ivy. "Undamming the Klamath," *Humboldt Geographic*, 1.17 (2020): 4.

¹¹⁴ Gómez-Barris, *The Extractive Zone*, 5.

¹¹⁵ Gómez-Barris, *The Extractive Zone*, 11.

Simpson's poem draws attention to water's life outside of its yoked roles as energy generation and storage, instead immersing readers in the free circulation of water between bodies, including the human body. Using the imagery of a bursting dam, "leaks" metaphorizes liberation, emotional expression, and water outside of the extractive view:

"dirt road
open windows
beautiful one, too perfect for this world
the immediacy of mosquitoes
humidity choking breath
my beautiful singing bird
five year old ogichidaakwe
crying silent, petrified tears in the backseat
until the dam finally bursts
you are the breath over the ice on the lake, you are the one

the grandmothers sing to through the rapids, you are the saved seeds of allies, you are the space between embraces." ¹¹⁶

¹¹⁶ Simpson, *Islands of Decolonial Love*, 21.

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Short III

"If the lights went out all over all at once"

Hydroelectric dams choke rivers across Turtle Island and around the globe. Dams enact dispossession and environmental violence in the name of "renewable" electricity generation. Linda Hogan's *Solar Storms* imagines land and water defense against dam development as a radical act of Indigenous resurgence and survivance. Set in the near future and deep pasts, Laguna Pueblo writer Leslie Marmon Silko's epic novel *Almanac of the Dead*, depicts a North America that is developed, dammed, and electrified. Instead of defense against new development, Silko's opus assembles a diverse coalition of revolutionaries intent on bringing down the US as a colonial nation state in order to decolonize North America by whatever means necessary: property theft, destruction, and violence.

Toward the close of *Almanac of the Dead*, Korean-American technorevolutionary Awa Gee reveals his plan to aid the Green Vengeance eco-warriors, a group comprised mostly of White American environmental extremists, in their attempts to bring about widespread electrical power failure. Of the plan, Awa Gee thinks to himself,

To destroy every last generator and high-voltage line would be doing the people a favor ... Solar batteries were the wave of the future. The plan was a long shot; Awa Gee was counting on the 'cost cutting' of the giant power companies to curtail or cancel auxiliary emergency systems. But if the plan worked, if the lights went out all over all at once, then the United States would never be the same again.¹

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¹ Silko, Leslie Marmon. *Almanac of the Dead* (New York: Penguin Books, 1992), 730.

Awa Gee, and the Indigenous characters he is an accomplice to, are not part of the Green Vengeance eco-warriors and remain critical of the European-American environmentalist philosophies of the group throughout the novel. In their essay "Accomplices not Allies, Abolishing the Ally Industrial Complex: An Indigenous Perspective," *Indigenous Action Media* lays out a provocation intended to intervene "in some of the current tensions around solidarity/support work" as they perceive "the current trajectories" to be "counter-liberatory." Their solution is to turn away from the concept of allies toward that of accomplices – which they define as "a person who helps another commit a crime" – as a model for radically working together.

Critiques of the Green Vengeance eco-warriors are perhaps most explicitly articulated by Clinton, a Black Vietnam Veteran working to organize and mobilize "The Army of the Homeless." Clinton is deeply suspicious of Green Vengeance in the novel: "something about their choice of words had made Clinton uneasy. Clinton was suspicious whenever he heard the word pollution. Human beings had been exterminated strictly for 'health' purposes by Europeans too often ... 'Too many people' meant 'too many *brown-skinned* people.' Clinton could read between the lines." Despite the novel's critique of the Green Vengeance ecowarriors and their lack of perceived intersectionality and attention to environmental justice issues, the novel imagines revolutionary solidarities across identity difference that include the Green Vengeance eco-warriors. In other words, the development and necessity of a broad-based environmental coalition, which always prioritizes the survival of "Mother Earth" by any

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² Indigenous Action Media, "Accomplices not Allies."

³ Indigenous Action Media, "Accomplices not Allies."

⁴ Silko, *Almanac*, 415.

means necessary, is at the heart of the novel. While *Almanac's* BIPOC characters may remain critical of Green Vengeance, they also form a complicated/uneasy alliance with them because of their dedication to "Mother Earth," and their shared desire to bring down the US because of its colonial, racial, border, capitalist, and environmental violences. These are the common denominators uniting the disparate revolutionary goals and identities of the multi-perspectival novel's diverse cast of characters.

Awa Gee's plan to turn the lights out "all over all at once," provides a window into how electricity is represented in the novel, and highlights an oppositional relationship between environmentalism(s) and the power grid. This representation of electricity as oppositional to environmentalism(s) tells an electrification that conflicts with the contemporary one that opens this project, which instead understands increased electrification as a solution to the climate change-driven imperative to decrease carbon emissions. Awa Gee's aim to take down the power grid links the US colonial nation state with electrification through metonymy – understanding the power grid to be a materialization of the nation state and, as such, as in a part/whole contiguous relationship with its colonial power and capitalist extraction. Disrupting electrical power – "if the lights [go] out all over all at once" – also intervenes in and disrupts authoritative colonial cultural and political powers: things would "never be the same again."

Almanac of the Dead "rewrites the history of the Americas" from the borderlands in order to challenge the last 500 years of colonial conquest, or as the novel names this era of violence, the "epoch of the death-eye dog." Silko's novel recognizes the violence of colonial borders and uses its position on the borderlands of the Southwestern US and Mexico as a place

⁵ Dillon, Grace. Walking the Clouds (Tucson: The University of Arizona Press, 2012), 215.

⁶ Silko, *Almanac of the Dead*, 251.

with the power to disrupt normative colonial and racial understandings of citizenship, political control, white supremacy, and the nation state. Chicana feminist Gloria Anzaldúa⁷ writes in her field-defining work *Borderlands: La Frontera* that "borders are set up to define the places that are safe and unsafe, to distinguish us from them. A border is a dividing line, a narrow strip along a steep edge. A borderland is a vague and undetermined place created by the emotional residue of an unnatural boundary. It is in a constant state of transition. The prohibited and forbidden are its inhabitants." Anzaldúa goes on to explain that borders are not merely environmental and material, but also cultural and psychological:

The actual physical borderland that I'm dealing with in this book is the Texas-US Southwest/Mexican border. The psychological borderlands, the sexual borderlands and the spiritual borderlands are not particular to the Southwest. In fact, the Borderlands are physically present wherever two or more cultures edge each other, where people of different races occupy the same territory, where under, lower, middle and upper classes touch, where the space between two individuals shrinks with intimacy.⁹

Anzaldúa, Gloria E., Simon J. Ortiz, Innéz Hernández-Avila and Domino Perez. "Speaking across the Divide." *Studies in American Literatures* 2.15, no. ¾ (Fall 2003/Winter 2004): 7-22.

⁷ It is important to note that there are many tensions between Chicanx Studies and Native American and Indigenous Studies, and between Native Studies and Anzaldúa's theorizing. In particular, the concept of mestizaje, or mixedness, has been critiqued for erasing colonial conquest and Indigeneity. Anzaldúa discusses these tensions directly in the interview "Speaking across the Divide." My use of Anzaldúa here is not an attempt to smooth over those complications and tensions, but is instead to bring her theorizing about the "unnaturalness" of borders and the intimacy of the borderlands to my reading of Silko, and more broadly, to my engagement with Indigenous Studies.

⁸ Anzaldúa, Gloria. *Borderlands: La Frontera* (San Francisco: Aunt Lute Books, 1987), 3.

⁹ Anzaldúa, *Borderlands*, preface.

Almanac rewrites a radical borderlands geography that challenges the territorialization of the colonial nation state and evokes a "Pan American reappropriation of the continent." The novel's commitment to the borderlands allows it to tell the story of a multiracial, multiethnic, multilingual, and multinational, decolonial revolution led by Indigenous North Americans.

Interweaving Pueblo teachings, African mythology, histories of BIPOC rebellion, and the millennia of pre-conquest history, *Almanac* presents readers with only one solution for survival: return all stolen land to its Native caretakers. In her collection of Indigenous science fiction Anishinaabe scholar Grace Dillon characterizes Silko's *Almanac* as "Biskaabiiyang." Dillon defines "Biskaabiiyang" as an "Anishinaabemowin word connoting the process of 'returning to ourselves,' which involves discovering how personally one is affected by colonization, discarding the emotional and psychological baggage carried from its impact, and recovering ancestral traditions in order to adapt in our post-Native Apocalypse world." Dillon reads the revolution the novel represents as "reestablish[ing] the Indigenous Americas." 13

Focused, in part, on the prophecy that all things European would pass away from the Americas, foretold by an extant Mayan almanac hidden by Mayan guardians and sent north for protection, now currently guarded by two Yaqui sisters, the novel depicts a near-future Indigenous-led class-based revolution that creates the possibility for a re-indigenized future in the aftermath of Euro-American colonial apocalypse. Almanacs traditionally function as "loose

¹⁰ Hunt, Alex. "The Radical Geography of Silko's 'Almanac of the Dead." Western American Literature 39.4 (2004): 268.

¹¹ Niemann, Linda. "Review: New World Disorder." *The Women's Review of Books* 9.6 (1992): 3.

¹² Dillon, Walking the Clouds, 10.

¹³ Dillon, Walking the Clouds, 11.

compilations of astrological, calendrical, meteorological, agricultural, historical, literary and other miscellaneous information," meant to suggest how "changes in the weather and earth" might affect us personally. Alex Hunt, in his article on the radical geographies of Silko's novel, observes a link between almanacs and the prophetic because of these functions. ¹⁴ The novel-as-almanac-as-prophecy, then, "opens a space of creative networks of subversive affiliation and border transgression, a space in which nation is undercut and refigured as a shifting borderlands where identity and ideology are cast loose from territory." ¹⁵

Of interest to me and this project is the broad, diverse coalition imagined by Silko and written into existence in *Almanac*. Taking up Karl Marx as a European who, while inherently limited by his European-context and identity, nearly got it right¹⁶ – "Marx had been inspired by reading about certain Native American Communal societies, though naturally as a European he had misunderstood a great deal"¹⁷ – the novel imagines a diverse, Indigenous-led, class-

Coulthard, Glen. *Red Skin, White Masks: Rejecting the Colonial Politics of Recognition* (Minneapolis: University of Minnesota Press, 2014), 6-13.

¹⁴ Hunt, "The Radical Geography of Silko's, 'Almanac of the Dead," 258.

¹⁵ Hunt, "The Radical Geography of Silko's 'Almanac of the Dead," 259.

¹⁶ Yellowknives Dene scholar Glen Coulthard theorizes at length about the usefulness and shortcomings of Marxism to Indigenous peoples and Native American and Indigenous Studies in his book, *Red Skin, White Masks.* In it, he identifies Marx's theory of primitive accumulation as useful for thinking about colonialism as "a form of structured dispossession" that thoroughly links "the totalizing power of *capital* with that of *colonialism.*" However, Coulthard also notes that Marx's contributions are not without flaw; nor are they a "ready-made tool for Indigenous peoples to uncritically appropriate in their struggles for land and freedom." Instead, he suggests that, in order to render "Marx's theoretical frame relevant to a comprehensive understanding of settler-colonialism and Indigenous resistance requires that it be transformed *in voncersation* with the critical though and practices of Indigenous peoples themselves." Coulthard goes on to identify three aspects of Marx's theories that do not align with Indigenous epistemologies and thus must be transformed in order to be useful to Indigenous Studies, which include Marx's temporal focus, his initial normative developmentalism, and the anti-ecological tendencies of Marx's works.

¹⁷ Silko, Almanac of the Dead, 519.

based revolution whose aim is to overthrow the global elite and destroy their plans to leave the "failing Earth that their greed has consumed" to live in orbiting biosphere penthouses. What shapes the complicated and diverse solidarities the book imagines is a commitment to "Mother Earth" above all else, and the necessity of its healing in the face of the ongoing European-American-led capitalist apocalypse.

It is important to note that one of the ways that Silko condemns European-American White supremacy and colonialism in the novel is through a troubling representation of White queer men. In my reading, Silko affirms the feminine, its connection to a spiritual Mother Earth, and strong Indigenous women through a linking of the Earth with fertility and reproduction. One of the ways she metaphorically symbolizes the infertility and barrenness of White Euro-American capitalist culture is through the figure of the White gay man and male same-gender desire as a rejection of the feminine, and thus as incommensurate with a love of the Earth and environment. This is troubling, as it not only naturalizes a biological understanding of gender, but suggests there is no place in a multi-ethnic, multi-racial, and class-based coalition for gay men and men who have sex with men. Her metaphoric use of White gay men works to further marginalize Indigiqueer, Two Spirit, and queer BIPOC people and the leadership roles and responsibilities they take on in their communities and environments.

Silko's "treatment of homosexuality as a characteristic of the ultimate racist, sexist, and class-dominant narcissism" ignores queer ecologies, queer futurities, and the possibility for queer-allyship in the struggle for class and race-based revolution, while also troublingly

¹⁸ Dillon, Walking the Clouds, 217.

¹⁹ Hunt, "The Radical Geography of Silko's 'Almanac of the Dead," 271.

advancing homophobic logics.²⁰ One of the novel's gay male characters does join the Green Vengeance eco-warriors, sacrificing himself to destroy the Glen Canyon Dam. In his last message, he states "Avenge gay genocide by the US government! / Die to save the earth."²¹ While some read this character's act of sacrifice as redeeming queer men in the novel, and his last words gesture to a kind of extreme anticolonial queer environmentalism, I struggle with a reading of this scene as redemptive. I worry that it can also be interpreted as the novel signaling that the only good kind of gay man is a dead one. The way Silko uses gay men symbolically naturalizes identity, excludes queerness as "unnatural," and comes up against the limitations of a biologically essentialist approach to gender and sexuality in imagining more liberatory ways of being with each other and the more-than-human environment.

In a culminating scene, titled "Green Vengeance – Eco-warriors," readers learn that six suicide bombers from the Green Vengeance group have sacrificed their lives to destroy Glen Canyon Dam. The destruction of the dam is a complicated moment in the novel, as it is both a symbol of the new world to be brought about by the revolution, and is a calculated move that gestures to the uneasy solidarity between the environmental justice practiced by the novel's BIPOC characters and the Euro-American environmentalism of the eco-warrior group. As Hunt notes,

Environmentally minded readers of western American literature are probably familiar with the history of the dam, oft cited by Edward Abbey. For Abbey, the destruction of

²⁰ Hunt writes that "Silko's homosexual men tend to define their sexuality as a vitriolic rejection of the feminine, a position incompatible with loving 'Mother Earth.' It must be said that Silko seriously risks asserting an ideology of the natural that excludes male sexual difference on the grounds of unnatural practices" (Hunt, "The Radical Geography of Silko's 'Almanac of the Dead," 272).

²¹ Silko, *Almanac*, 730.

Glen Canyon Dam is a fantasy in *Desert Solitaire* (1968) and an unfulfilled ambition in *The Monkey Wrench Gang* (1975). Yet in *Almanac* the destruction of the dam is anticlimactic, not the apex of achievement but only an event indicative of a far more sweeping philosophical shift."²²

While Hunt reads a European-American environmental genealogy into Silko's choice of Glen Canyon Dam (one which cannot be ignored), there is also an Indigenous genealogy of relationality to the lands and waters destroyed by the dam. I cannot help but read Silko's representation of Glen Canyon Dam, Lake Powell, and the Colorado River in relation to Diaz's writings about the relationship between the Colorado River, her people, and her body: "The Colorado River is the most endangered river in the United States -- / also, it is a part of my body. / I carry a river. It is who I am: 'Aha Makav. This is not metaphor." Reading *Almanac of the Dead* through Diaz's embodied connection to the Colorado River and her mourning for its alteration and destruction at the hands of settler colonial development, Silko's imagined destruction of the dam could be interpreted as the catalyst for a radical (re)making of the North American landscape that clears the way for renewed Indigenous relationships with lands and waters.

Silko's *Almanac* flips my previous focus on the violence of hydroelectric dams and the costs and consequences of a hydropowered electric grid in chapter three to focus instead on the vulnerabilities of the power grid and the way that these infrastructures provide direct targets for overthrowing the US colonial nation state and decolonizing the landscape. The destruction

²² Hunt, "The Radical Geography of Silko's 'Almanac of the Dead," 269.

²³ Diaz, *Postcolonial Love Poems*, 46.

of the Glen Canyon Dam is imagined by Silko as one revolutionary node in a larger web of actions aimed at Indigenous-led BIPOC futurities.

When thinking of his plan to bring down the US power grid, Awa Gee's thoughts turn to the Earth: "Earth that was bare and empty, earth that had been seized and torn open, would be allowed to heal and to rest in the darkness after the lights were turned out." Here again, Awa Gee links electricity to extraction, the "seizing" and "tearing open" of the Earth. Awa Gee, again, conceives of electricity metonymically, through the energetic work it performs – "lights" and "lights out." Awa Gee inverts Enlightenment narratives that imagine progress, light, and energy to be central powers of modernity. Healing and rest are only possible in the absence of lights powered by the extractive electric grid and under the veil of darkness. For Awa Gee, some things require the dark.

²⁴ Silko, *Almanac of the Dead*, 683.

CONCLUSION

At stake throughout *The Leaky Grid* are different ideas about the future, modernity, what it means to live well and sustainably, and how all of these ideas are entangled with electricity. While electricity may be a common metonym for progress and US modernity, as I found repeatedly throughout the Black and Native cultural production that make up *The Leaky Grid*, this metonymic connection between linear technological progress and electricity is more complex, uneven, and extractive than a simple narrative of electrified progressive contends. Merely telling the story of increased electrification as linear progress is akin to what Chimamanda Ngozi Adichie refers to as "the danger of the single story." *The Leaky Grid* works to tell different stories about electricity, electrifications told otherwise, that are not about linear techno-developmental progress. In the concluding paragraphs of "An Anthropology of Electricity from the Global South," Akhil Gupta writes of the imperative to reimagine electricity use in order to address the problem of sustainable futures:

The dystopian future embodied in the eco-suicidal age of the Anthropocene makes it clear that nation-states in the global South cannot emulate the developmental trajectory of the global North. Furthermore, it is equally clear that nation-states in the global North cannot continue on the trajectories they have followed until now ... The problem of sustainable futures requires a complete recalibration of energy use with social and political life. We thus have to reimagine electricity use in the future that does not simply seek to extend the patterns of the present. Bringing more people to the grid so that they can consume more electricity is neither feasible nor desirable. Yet this is precisely what so many solutions to climate change seek to do ... What is at stake here are different ideas about the future. That the aspiration of the emerging middle class in the global

South is to become more like the rich citizens of the global North is an index of the colonization of their imaginations of the future.¹

Gupta's concerns complicate the mainstream imaginative of more people on the grid that the US exports as progressive and sustainable. His conclusion also helps frame the stakes of *The Leaky Grid* – explaining why it is so crucial to rethink electrification in the face of climate change. Gupta reveals the connections between energy systems, cultural imaginaries, and colonization: energy systems both materially colonize through extraction and also have the potential to colonize the imagination, shaping what is possible in the present and future. Electrified modernity, which is a term I employ throughout *The Leaky Grid* to reference the ways that US modernity in the twentieth and twenty-first century requires electrification, has become a monocultural colonization of the imagination.

Each of *The Leaky Grid's* three chapters provides a different perspective on electrified modernity by staging a conversation between Black and Native Studies. The first chapter, "Siphoning and Sabotage," reveals the ways in which colonial, white supremacist, and capitalist property relations, and their deep imbrication with systems of enslavement and racism, shape electrification in the US. Entering into these property relations through the act of stealing electricity, the first chapter takes an undercommons approach to electricity born from a reading of Ralph Ellison's *Invisible Man* and inspired by Fred Moten and Stefano Harney. The chapter offers up theft as a form of refusal: electricity theft refuses to play by the

¹ Gupta, "An Anthropology of Electricity From The Global South," 564.

rules of racial capitalism and settler colonialism. It is a refusal to be excluded from uneven infrastructural flows.²

Chapter two, "Reimagining California's Relationship with Fire," offers readers the possibility of elemental infrastructure – both in the already practiced form of Indigenous Cultural Burning and, speculatively, in the form of Stefanie Cox's fictional fyrewall, a vast self-sustaining "blue, shimmering sheet of compressed oceanwater" that protects Cox's future Los Angeles from passing fires, while providing the city's inhabitants with a carbon-free source of power. Chapter two is fundamentally about infrastructural worldmaking beyond the Western nature/culture dichotomy, both imaginative and real, in order to live more reciprocally with the more-than-human environment.

The third chapter, "No one had asked the water what it wanted," centers land and water protection against hydroelectric extraction to reveal how US electrification relies on the historical and ongoing colonization of Turtle Island's lands and waters. While going beyond an oppositional politics to be, as Estes describes, "the collective faith that another world is possible," land and water protection it is a radical form of refusal. Land and water defense refuses to engage in colonial and capitalist land relations, refuses to sacrifice sacred lands and waters to fuel Western modernity.

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² My thinking about theft is informed by Moten's 2021 MLA Presidential Plenary "Poetics of Persistence in Black Life," which he participated in with Claudia Rankine, M. Nourbese Philip, and Evie Shockley. In his talk, Moten asserted that the only ethical choice left to Black Americans under white supremacy and settler colonialism is theft.

³ Cox, "Fyrewall," n.p.

⁴ Estes, *Our History is the Future*, 19.

When staging a conversation between Black and Native studies' about electricity, there are aporias and incommensurabilities. Ralph Ellison and Jean Toomer, for example, were interested in what electricity might make possible for Black Americans. While the narratives they present are nonlinear and do not link electricity to progress in an oversimplified way, they are invested in the aesthetic and cultural possibilities of electrification. Linda Hogan and Leslie Marmon Silko, on the other hand, represent electricity as oppositional to their cultural lifeways, and as in conflict with their ways of being in the world. There is little for electrification in the worlds of *Solar Storms* and *Almanac of the Dead* besides the colonial violence it ushers in. Yet, these incommensurabilities do not preclude the possibility of coalitional solidarity. As Octavia's Butler's *Parable of the Sower* shows readers, difference makes a community stronger. And, as Silko's diverse coalition of radical revolutionaries in *Almanac for the Dead* illustrates, coalition is possible across categories of difference.

The Venn diagram of Black and Native studies approaches to electricity has a center, where both overlap, and where the possibility of solidarity in spite of and because of difference arises. I offer two possible points of connection from my reading. The first is the power of electrified music. Invisible Man steals electricity in order to listen to Louis Armstrong, to fall into his music. *Solar Storm's* Angel spends an afternoon dancing to rock and roll music from her relative's newly electrified radio, able to shed the fear and weight she feels for the brief beat of a few rock songs. We Are the Halluci Nation's 2017 collaboration with Saul Williams, "The Virus," which I write about at length in the introduction, is an example of the Black and Native musical collaborations and political solidarities that electronic music makes possible. "The Virus" represents the varied Indigenous and Black cultural lifeworlds electricity powers.

The other point of connection is the concept of refusal. While electricity theft and land and water protection are different acts, they are both, as I have come to understand them, acts that refuse the terms dictated by modernity. Acts of refusal do not place people outside of modernity, such as the racist narratives like the ones that Alexander Weheliye writes against imagine, which dismiss Black technologies, particularly sound technologies, as not technological at all.⁵ Or, colonial narratives like that told by the dam developers in *Solar Storms* which paint Indigenous people as outside of modernity, forever trapped in the past. Instead, in my reading, acts that refuse the terms dictated by electrified modernity place the refuser at the center of the most important contemporary struggles: struggles for liberation, decolonization, the future, and for the more-than-human living Earth. Acts of refusal, like electricity theft, and land and water protection, are about the desire to live differently and about how people make lives that matter in the wreckage wrought by electrified modernity.

The Leaky Grid begins with the assertion that narratives, bodies, and energy systems are inherently porous. Porosity and leakiness, as heuristics and analytic frames, provide tools that make it possible to center other stories, experiences, and interactions with electricity beyond the single progressive narrative of electrification. Taking a porous approach to the power grid allows me to center how people make lives worth living in the shadow/afterlives/ongoing destruction of colonial modernity.

While the porousness of the power grid might be taken advantage of both narratively and materially by electricity thieves, the leaky grid might also cause spectacular environmental violence through its dangerous sparking. In short, porosity, while a fundamental condition, is

⁵ Weheliye, Alexander G. *Phonographies: Grooves in Sonic Afro-Modernity* (Durham: Duke University Press, 2005), 2.

not the goal, not the endgame. A porous world is not the opposite of the single story Adichie warns of. Porosity is a lot like haunting. Morill, Tuck, and the Super Futures Haunt Qollective explain that haunting is not the endgame of dispossession: "the opposite, the endgame of opposing our dispossession is ... not haunting, though I'll do it if I have to; it is mattering." The goal of opposing uncomplicated accounts of increased electrification as progress is not porosity. The endgame is Louis Armstrong's jazz. The endgame is Honorable Chairman Goode's relationship with fire. The endgame is Earthseed. The endgame is spawning whitefish. Haunting is not the goal. Porosity is not the goal. Mattering is.

⁶ Morrill, Tuck and the Super Futures Haunt Qollective, "Before Dispossession, or Surviving It," 5.

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