Jessica Hurley and Jeffrey Insko

Introduction: The Infrastructure of Emergency

On July 16, 1979, the largest radiological disaster in United States history took place in New Mexico when the failure of a tailings dam at the United Nuclear Corporation's Church Rock uranium mill led to the release of 1,100 tons of radioactive mill waste and 95 million gallons of highly acidic, highly radioactive liquid effluent into Pipeline Arroyo, from where it entered the Río Puerco. Following its course though the Navajo Nation, the irradiated river left radiotoxic sediments and radioactive groundwater in wells and aquifers across Dinétah. Built on land known to be geologically unsound and displaying large cracks as early as 1977, the dam was known by both the United Nuclear Corporation (UNC) and the state and federal agencies that had granted its construction license to be an unstable infrastructure on shaky ground (Brugge, deLemos, and Bui 2011). But this was Navajo ground, and the violence was slow, and the mill produced $200,000 in yellowcake per day, and so the risk of catastrophe was ignored until it was actualized—at which point it was essentially ignored again, overshadowed by the Three Mile Island release that had occurred four months earlier, which had been more spectacular and impacted mostly white settlers rather than Diné. Desultory cleanup efforts by first the UNC and then the Environmental Protection Agency (EPA) have left the area widely contaminated; as of January 2021, "groundwater migration is not under control" (EPA n.d.).[1] The devastating health effects of long-term exposure to radiotoxins continue to impact the Navajo Nation, where they both compound and are compounded by the social and bodily harms of life lived under colonial occupation (Voyles 2015: 4).

Thirty years later and 1,500 miles away, the most expensive inland

American Literature, Volume 93, Number 3, September 2021
DOI 10.1215/00029831-9361209 © 2021 by Duke University Press

Downloaded from http://read.dukeupress.edu/american-literature/article-pdf/93/3/345/953777/345hurley.pdf
by guest

oil spill in US history took place near the city of Marshall, Michigan. On July 25, 2010, an Enbridge oil pipeline transporting diluted bitumen from the Alberta tar sands ruptured, spilling more than a million gallons of oil into Talmadge Creek, a tributary of the Kalamazoo River. Oil gushed from a six-foot-long gash in the thirty-inch steel pipeline for seventeen hours before the leak was finally detected. Meanwhile, the oil reached the Kalamazoo, where it traveled another thirty miles downriver, saturating the riverbank and coating flora and fauna. Compounding the spill and confounding first responders, the oil that spilled did not float on the surface of the water. Instead, the chemicals used to dilute the thick crude for pipeline transport, which included the known-carcinogen benzene, evaporated into the air. The remaining bituminous material then sank to the bottom of the river, rendering ineffectual ordinary containment efforts. Years before the spill, safety inspections on the pipeline had revealed serious defects, but weak federal oversight and a corporation focused on profits rather than safety disincentivized mitigating action (National Transportation Safety Board 2012).[2] Despite its significance as the first major release of tar-sands oil into a body of freshwater, the Kalamazoo River spill attracted little national attention, overshadowed by the more spectacular, and deadly, Deepwater Horizon blowout in the Gulf of Mexico just a few months prior. After a seven-year, billion-dollar cleanup effort, thousands of gallons of oil remain in the Kalamazoo's riverbed and the public health effects upon local residents exposed to contaminated air remain entirely unstudied, despite anecdotal accounts of a variety of illnesses.

Turning our attention to Church Rock and Marshall rather than Three Mile Island and Deepwater Horizon, we mean to highlight not the sensational event but the routine character of infrastructural violence, not the singularity of disaster but its ongoingness under conditions of colonial racial capitalism. The Río Puerco and the Kalamazoo River, for example, had been polluted long before the collapse of the UNC tailings dam and the rupture of the Enbridge pipeline. From 1968, when the Río Puerco became a perennial stream, to the mid-1970s, there was no regulation of water quality downstream from the mines; as Traci Brynne Voyles (2015: 165) notes, "New Mexico Environmental Improvement Division (EID) reports indicated that the river 'contains levels of radioactivity and certain toxic metals that approach or exceed standards or guidelines designed to protect the health of people, livestock and agricultural crops,' which were its primary uses by Diné residents of the Church Rock area." Similarly, the

Downloaded from http://read.dukeupress.edu/american-literature/article-pdf/93/3/345/953777/345hurley.pdf
by guest

Kalamazoo River had suffered various forms of pollution going back to the nineteenth century; one researcher in the 1960s famously described it as having the color and consistency of a blueberry milkshake (Dempsey 2001: 1). In 1990, the US EPA declared portions of the river a superfund site, owing to high levels of polychlorinated biphenyls (PCBs) from toxic waste dumped into the river by paper mills and other industrial operations.

These examples of modern pollution are continuous with much longer histories of environmental degradation wrought by what the anthropologist Anne Spice (2018: 44) calls the "invasive infrastructures" of settler colonialism. Eighteenth- and nineteenth-century settlers in Michigan decimated the sturgeon populations and destroyed the wild rice beds that had long sustained the lifeways of the Anishinaabe people. Early in the twentieth century, hydroelectric dams built to sustain sawmills altered the river's flow and disrupted its ecology. Later, in the 1960s, Michigan experienced its own miniature oil boom; the gushers and seeps and leaks that have long typified petroleum extraction soaked wetlands and tributaries and bled oil into the river. In New Mexico, the war against Native people has likewise long been waged as a war against the land: from the nineteenth-century eradication of peach, corn, and bean plantations as an act of conquest; to the mass slaughter of Navajo sheep, horses, cows, and goats in the 1930s to clear the land for the Hoover Dam; to the oil wells and coal and uranium mines that still occupy the land today. Thus, the histories of the settler occupation of Dinétah and of Michigan are histories of the systemic eradication of life-giving infrastructures and their replacement with eliminationist infrastructures of extraction.

From the perspective of US settler history, these latter infrastructures have long constituted visible signs of progress; they are seen as wonders of technological ingenuity that promise civilizational advancement, wealth, and freedom. Yet this "discursive positioning of infrastructure as a gateway to a modern future" (Spice 2018: 42) obscures the destruction and violence that settler infrastructures impose in their everyday operations as well as at moments of breakdown, which often painfully reveal the uneven distribution of those infrastructures' promised benefits across populations. Promiscuous in their range of meanings and effects, built infrastructures are "dense social, material, aesthetic, and political formations that are critical both to differentiated experiences of life and to expectations of the future" (Appel, Anand, and Gupta 2018: 3). Perhaps nowhere has this been rendered more vividly in the twenty-first century than in the

Downloaded from http://read.dukeupress.edu/american-literature/article-pdf/93/3/345/953777/345hurley.pdf
by guest

many instances of infrastructures as both instruments of injustice and sites of resistance: from the activists working to secure clean water in Flint and Detroit, to the abolition movement seeking to dismantle brutal police forces and the prison-industrial complex, to the grassroots movement against the Keystone XL pipeline and the Indigenous-led mass protests at Standing Rock against the Dakota Access Pipeline.

The latter protests respond not just to historical injustices, including the ongoing violence inflicted by settler colonialism and extractive capitalism. They respond also to the planetary ecological emergency produced by these long histories: global warming. In the context of that emergency, infrastructures occupy a complex place, at once causes, casualties, and solutions. The infrastructures of empire and capital require and sustain fossil fuel consumption, which is why, for example, new oil and gas pipeline projects have become pivotal sites of protest for grassroots climate activists and Indigenous water protectors. Given the petroleum economy's resistance to democratized labor action, thwarting new pipeline infrastructure construction provides an indirect means of halting extraction.[3] At the same time, already-precarious and deteriorating infrastructures are imperiled by the myriad effects of climate change: rising sea levels threaten coastal power plants; intensified weather events like hurricanes overwhelm water and sewer systems; heat waves cause stress on roads and bridges owing to thermal expansion. The lethal combination of drought-like conditions, settler-colonial land management, and poorly maintained power lines in California, for example, has increased the frequency and intensity of wildfires, destroying homes, lives, and thousands of acres of forest.

Yet infrastructure also promises the solution to these problems.[4] A shift from greenhouse-gas-emitting energy sources to renewables will require massive public and private investments in new infrastructural systems: new modes of mass transportation, wind farms, and solar-powered energy grids. The need for such infrastructure constitutes its own kind of emergency, one that calls for both dismantling and rebuilding. As Michael Truscello (2020: 31) puts it in *Infrastructural Brutalism: Art and the Necropolitics of Infrastructure*, "only a revolutionary examination of existing infrastructure, retrofitting of carbon-intensive infrastructure, decommissioning of untenable infrastructure that requires expert knowledge, and sabotaging of the infrastructure that is too dangerous to keep is capable of transforming conditions currently so brutal that they incur mass extinction." A recently

Downloaded from http://read.dukeupress.edu/american-literature/article-pdf/93/3/345/953777/345hurley.pdf
by guest

released report from Princeton University (Larson et al. 2020) details the urgent necessity of such a revolutionary transformation. According to the report, the United States will need to act with extraordinary haste to construct the systems that will allow the country to reach net-zero greenhouse gas emissions by 2050—a goal promoted by many, including President Biden. That means an enormous expansion in the nation's electrical grid, an accelerated rate of installation of wind turbines and solar panels, the retrofitting of homes so that they can be powered by energy sources other than oil and gas, and the construction of a new network of currently nonexistent carbon-capture storage facilities, among other efforts.

As sobering as the Princeton study (and the Intergovernmental Panel on Climate Change reports on concentrations of global atmospheric carbon to which it implicitly responds) might appear, the framework of emergency is not without its own dangers. For one thing, its visions of both infrastructural change and the climate emergency might not be expansive enough. For while it imagines new forms of energy production, distribution, and consumption, it fails to imagine new social arrangements; as contemporary movements for ecosocialism, decolonization, and environmental racial justice suggest, infrastructural redevelopment without social and economic reorganization can quite easily perpetuate the immiseration that defines our present. Put another way, heeding the call to swift action on such a broad array of initiatives risks reproducing the ill effects of what the Potawatomi scholar Kyle Powys Whyte (2021) calls "crisis epistemology." Crisis epistemology apprehends present conditions as both new and urgent. The presumption of newness, the unprecedented, allows for a degree of historical forgetting of past emergencies, while the presumption of urgency "suggests that swiftness of action is needed to cope with imminence. There either may be moral sacrifices that have to be made or ethics and justice are not elevated to a level of serious attention" (Whyte 2021). To illustrate the point, Whyte cites historical instances of injustice resulting from infrastructure projects in the twentieth century: dam projects that flooded Indigenous land and displaced Indigenous people, and the exclusion of Indigenous peoples from energy grid systems. With its single-minded focus on emissions reductions and technologies, the Princeton study provides no guidance to policymakers who might take up the report regarding how the pursuit of the study's goals might wind up duplicating, in the name of solving a crisis that is "new" only from a settler perspective, past instances of environmental or infrastructural injustice.[5]

Downloaded from http://read.dukeupress.edu/american-literature/article-pdf/93/3/345/953777/345hurley.pdf
by guest

But if it's hard to relinquish "emergency" and "crisis" as responses to climate change, then perhaps thinking differently about infrastructure can help address the epistemological and ethical problem that Whyte identifies. Here, we might turn to Winona LaDuke and Deborah Cowen's (2020: 244) concept of "Wiindigo infrastructure." The infrastructures of settler colonialism disposition the world toward its own destruction, enabling the transformation of the whole planet into an "extractive zone" (Gómez-Barris 2017) for the production of capital and the unevenly distributed immiseration of human and nonhuman life.[6] For LaDuke and Cowen (2020: 244), this aligns settler-colonial infrastructures with the Wiindigo, "the cannibal monster of Anishinaabe legend" that figures the rapacious extractivism of colonial powers. Yet as LaDuke and Cowen also emphasize, the immense scale of Wiindigo infrastructure and its power to determine how things will go does not make it an unstoppable force. Rather, to focus on infrastructure as a way that power is expressed and mediated is to open up a new set of opportunities for subversion, resistance, and counter-worldmaking: "infrastructure is the spine of the Wiindigo, but it is also the essential architecture of transition to a decolonized future" (246). The redispositioning of infrastructure thus becomes a crucial tool for those seeking to produce different realities in the present and alternative possibilities for the future.

What role might literature and literary studies play in this work of redispositioning? Insofar as it shapes our perception of both space and time, infrastructure might be understood as a structuring form. In this, as Caroline Levine (2015) has explained, it has much in common with literature, itself composed of structuring forms that simultaneously reflect and construct our ideas about the world and how to move through it. In this special issue of *American Literature*, we seek to interrogate the role of literature and literary study in the analysis and reimagining of the infrastructure of emergency. What is the role of literature in helping us think through, around, beyond, and beneath the impasse of infrastructure? How can literature produce imaginaries of infrastructure that might enable us to use it for something other than its current fascistic, colonial, and extractive tendencies? How can literary representations of infrastructure modulate our lived experience of attachment, entanglement, relationality, and collectivity, especially as a way of combating a resurgent fascism that denies any value in public infrastructure beyond the prison, the concentration camp, and the border wall? How can literature help to revivify a commitment to the common good—one that might, for the first time in the United

Downloaded from http://read.dukeupress.edu/american-literature/article-pdf/93/3/345/953777/345hurley.pdf
by guest

States, be capable of conceptualizing a public good that is not built on the bodies of those excluded from the public but on mutual aid and an ethics of care? Some version of collectivity is more important than ever, but we have to be able to redefine community as separate from the ideas of national identity and national progress that have led us into the current emergency. What is the relationship between rethinking infrastructure and rethinking collectivities that do not reproduce the eliminationism, homophobia, racism, ableism, gendered violence, and ecocide that have been produced by colonialism?

To think of infrastructure as something that can be retooled for justice is simultaneously a more challenging and a more modest aim than models of revolution built on burning it all down to begin again.[7] If another world is indeed possible, then how can we make it from the infrastructures of the world that we have? In asking these questions, we seek to move infrastructure studies beyond the paradigm of visibility that often frames the problem and its solution in terms of perception. This framework emphasizes what the literary critics Michael Rubenstein, Bruce Robbins, and Sophia Beal (2015: 576) call the "boringness of infrastructure," the fact that it plays an invisible, background role in most of our lives; the fact that in its smooth operation, most of us can take it for granted. The critical approach they call "infrastructuralism" attends to literary texts "that try to make infrastructure, as well as its absence, visible." Elsewhere, Robbins (2007: 29), for example, thus takes up the appearance of public utilities in fiction by Jonathan Franzen, Milan Kundera, and others in order to bring them into focus as "objects of political struggle." And Levine (2015: 588) considers material infrastructures in relation to other deep structural formations like racial hierarchies, in order to "unsettle the privileged obliviousness" that obscures the work that infrastructure performs. This focus upon the taken-for-granted quality of infrastructure is echoed in the work of Kate Marshall (2013: 82), who has argued that the "becoming-visible of infrastructure" in the US modernist novel helps "reveal the novel's communicative architectonics" (84).

Yet scholars working in other fields, like anthropology and cultural geography, have already begun to reveal the limitations of the visibility/invisibility paradigm. As Thomas S. Davis (2021), following thinkers in these fields, has argued, "we need not only make infrastructure visible, but to enact ways of seeing it better." The history and literature of the United States provide an especially rich archive of materials for a critical project that seeks to trace the genealogies and theorize the imagined futures enabled (or foreclosed) by infrastructure. Since

Downloaded from http://read.dukeupress.edu/american-literature/article-pdf/93/3/345/953777/345hurley.pdf
by guest

settler arrival, those infrastructures—from the transcontinental railroad to the interstate system, from coal mines to solar farms—have served as appurtenances of empire and capital *and* as signs of progress; they have been instruments of violence, destruction, oppression, and ecological degradation *and* tools of wealth and growth. In ways as yet largely unexamined, US poetry and narrative fiction have documented and contested the social, cultural, and ideological work performed by these infrastructures, often "interrogat[ing]" as Jessica Hurley (2020: 3) shows in her study of US nuclear infrastructure, "the racist, sexist, colonial, and homophobic logics that structured" them.

The contributions to this special issue initiate just such a series of investigations. In "War on Dirt: Aesthetics, Empire, and Infrastructure in the Low Nineteenth Century," Andrew Kopec frames the settler-colonial project as one organized by the imperative to transform dirt into infrastructure. Tracing the literary history of water infrastructures such as the Panama and Erie Canals, Kopec argues that the two primary aesthetics of infrastructure—the sublime drive toward modernity described by Appel, Anand, and Gupta and the everyday boring hiddenness described by Rubenstein, Robbins, and Beal—in fact operate dialectically to facilitate settler colonialism's seizure and transformation of the landscape: large national infrastructure projects are seen first as too sublime to be stopped and then as too mundane for their ongoing violence to be registered. Cutting through an opposition that has long defined critical infrastructure studies, Kopec reveals instead how the spatiotemporal politics of infrastructure change over time according to the needs of the settler-colonial state. And yet the capacity for shifts in how infrastructure signifies also holds open the possibility that new ways of inhabiting infrastructure—and especially the ruins of infrastructure that mark our contemporary emergencies—might yet develop, allowing us to move beyond the "infrastructural dialectic" and create "a platform from which to reject the appetitive, imperial wild surmises that run through the infrastructures of coloniality from the past to the present."

If affect organizes how we perceive and respond to infrastructure, as Kopec suggests, then literature becomes a crucial mechanism for modulating larger structures of feeling around infrastructure and the public good. Jamin Creed Rowan's "The Hard-Boiled Anthropocene and the Infrastructure of Extractivism" proposes hard-boiled fiction and the noir tradition as unexpected sites where such a modulation occurs, showing how the obliviousness and cruelty that define the noir villain map on to the victory of extractivist infrastructures from

Downloaded from http://read.dukeupress.edu/american-literature/article-pdf/93/3/345/953777/345hurley.pdf
by guest

the dam to the oil field. By redefining the infrastructures of extraction as "a type of weapon through which individuals commit crimes" and "a mechanism for concealing criminality," hard-boiled fiction, composing a structure of feeling in which revelation leads to shock and outrage, subverts the "emotional and ethical evasion" that infrastructure facilitates. More recent hard-boiled climate fiction such as Paolo Bacigalupi's *The Water Knife* (2015) builds on this tradition to show how both the present and the future have been immiserated as sources of value extraction via the infrastructures of the past, a grim vision but one that, nonetheless, allows for the emergence of new collectivities in the ruins of the past's collapsing infrastructures. Building on AbdouMaliq Simone's theory of "infrastructures of relationality," Rowan proposes that the collective maintenance of infrastructures in the service of communal survival might recompose an idea of the common good that would be oriented toward life rather than extraction.

The noxious notions of individual sovereignty that define the noir villain are also central to Suzanne F. Boswell's "'Jack In, Young Pioneer': Frontier Politics, Ecological Entrapment, and the Architecture of Cyberspace." Boswell demonstrates that the arrival of the internet in the United States was deeply entangled with ecological emergency, as the supposed immateriality of cyberspace was seen as offering an escape from a world running out of space and resources. Immediately mapped on to the older frontier chronotope, cyberspace became a disembodied place where whiteness, sovereignty, and individualism reigned and to which "the white user belonged as an indigenous inhabitant." These early colonial and ecological frameworks for understanding virtual space would go on to shape the technological and digital infrastructures of the internet through the 1990s, "influencing the modern user's experience of the internet as a private space under their sovereign control." If for Kopec infrastructure materializes empire, then Boswell demonstrates how ideas of empire and conquest have shaped our ostensibly immaterial digital infrastructures, foreclosing the possibility of an internet defined by collectivity in favor of one that demands "individual and private access."

And yet, as Boswell demonstrates in her reading of William Gibson's Sprawl trilogy (1984–1988), the ecosystem of cyberspace never succeeds in manifesting the new frontier. Rather, it places users in an inescapable infrastructural connection to everything the frontier would prefer to avoid: the collective, the nonsovereign, the political, and particularly the racialized other. Here we see infrastructure operating as something like the collective unconscious of frontier

Downloaded from http://read.dukeupress.edu/american-literature/article-pdf/93/3/345/953777/345hurley.pdf
by guest

individualism, materializing the political and social connections and the intimacy between bodies that the image of the cowboy is meant to preclude. Boswell's work thus offers a way to cut through one of the key impasses of the present emergency: the ceaseless demand by those in power that we develop individual solutions to planetary emergencies like climate change. Attention to the infrastructures of climate crisis is not only a more accurate way of perceiving cause and effect, but it is also a way of accessing the reality of collective agency in the Anthropocene without falling into the flattened universalism of what Dipesh Chakrabarty (2009: 213) has called "species thinking." Infrastructure is collective and puts us into relation whether we like it or not; it also shows us *how* we are related, to what degree, and within what flows of power. Infrastructure mediates the universal and the individual, offering a systemic analysis that maps connections, causes, and consequences across different scales of space and time without suggesting that "we" are all equally culpable for what unfolds.

The first three essays in this collection show how settler capitalism has shaped the infrastructural transformation of the continent, from the canal to the data center. The final three essays focus on the intersections of infrastructure with the ongoing emergencies of racial oppression: infrastructure as racial violence. In "Geomemory and Genre Friction: Infrastructural Violence and Plantation Afterlives in Contemporary African American Novels," Rebecca Evans considers the spatial dimensions of what Toni Morrison calls rememory: the simultaneously gothic and mimetic hauntings that are produced when the violent racial histories of place continue to create racial violence in the present through the continuities of infrastructure. Evans proposes the term *geomemory* to define an emergent formal technique in contemporary African American fiction where the racial emergencies of the present are revealed to be the result of still-active infrastructures of white violence; what might be taken to be a purely gothic form is theorized by Evans instead as one produced by the friction between gothicism and realism, where the haunting of the present by the past is less a suggestive trope than a literal reality. As Evans writes, "geomemory doesn't just show that history haunts us; it shows precisely how that haunting plays out in the human use and misuse of land and the human organization of space and infrastructure." Tracing the afterlives of the plantation to the petrochemical plants that debilitate bodies in Louisiana's Cancer Alley, the prison farms that Jesmyn Ward represents in *Sing, Unburied, Sing* (2017), and the postbellum

Downloaded from http://read.dukeupress.edu/american-literature/article-pdf/93/3/345/953777/345hurley.pdf
by guest

medical experiments evoked by Colson Whitehead in *The Underground Railroad* (2016), Evans shows how the temporal collapses of Black gothicism and geomemory serve to puncture the aggressive forward drive of infrastructure-as-national-modernity-and-concretized-sign-of-progress, revealing and contesting instead the temporal drag by which infrastructure situates racialized bodies within the ongoing catastrophe of white supremacy.[8]

If the plantation lives on in the social and spatial continuities of its infrastructures, how, then, might we imagine modes of survival and flourishing for Black lives in worlds that are infrastructured toward their containment and destruction? In "The Subsident Gulf: Refiguring Climate Change in Jesmyn Ward's Bois Sauvage," Kelly McKisson reorients our vision away from the infrastructures that occupy the ground and toward the ground itself. McKisson shows how large national infrastructure projects in the Gulf have led to the loss of land as an ecological infrastructure, as leveeing, river channeling, and pipelines, as well as the rising waters of climate change, produce accelerated subsidence that disappears land at a rate of an acre an hour in the Mississippi Delta. For McKisson, subsidence becomes visible in Ward's work as a figuration that binds environmental crisis to environmental and racial injustice, with "sinking" figuring both the disappearing land and the literally and metaphorically drowning bodies that Ward invokes in her representations of Black Gulf life during and after Katrina. And yet, the search for dry ground that defines nationalist responses to climate change also loses its power. Rather, the question in Ward's novels is how to live on shifting, sinking, vanishing land; how to orient toward water; how to salvage a life at the waterline; how to inhabit and imagine space differently as a form of resistance to the subsident force of infrastructural emergency. Security and stability may not be possible, here, but they also may not be desirable in a world structured by infrastructural violence. Infrastructure promises continuity across time, but that continuity can also mean the continuation of racial and ecological violence. In improvisational acts of salvage that seek to prolong subsistence in a subsiding world, McKisson sees how "the instability of the land can be countered by the peoples' resistant and imaginative postures of dissension." A subsiding world, a world of ongoing emergency, requires an infrastructure built anew each day, a place that is composed and recomposed by dissident acts in constantly renewing relation.

We close this issue with an essay that transitions us away from more traditional infrastructure projects to one that is less immediately

Downloaded from http://read.dukeupress.edu/american-literature/article-pdf/93/3/345/953777/345hurley.pdf
by guest

visible as such: the conglomeration of buildings, laws, institutions, and capital markets that is the US healthcare system. Michelle N. Huang's "Racial Disintegration: Biomedical Futurity at the Environmental Limit" argues that the "underlying conditions" of health "extend beyond the individual racialized body and should refer also to the structural and material conditions of damage to which it is subject." Huang challenges the deracination of healthcare—which promises a postracial utopia of individually tailored genomic medicine while ignoring all of the ways in which racialized environmental emergencies render people unevenly vulnerable to death (Gilmore 2007)—by drawing on contemporary Asian American dystopian literature, which "provides a crucial case study through which to analyze futurities where healthcare infrastructures intensify racial inequality under terms that do not include race at all." Understanding health as a consequence of space and infrastructure contests the privatization of medicine, with its emphasis on individual wellness and personalized solutions, and suggests that race, solidified in infrastructure and infrastructural violence, will manifest as damage to bodies that we perceive as illness rather than recognizing it as the product of racial violence. For Huang, the technique of "studious deracination" used in recent novels by Chang-rae Lee and Rachel Heng entrains us to see how racism works "outside-in, not inside-out," with race adhering in and emerging from the infrastructures that white supremacy produces.

As we write in the early days of 2021, the vexed relations between infrastructures and emergencies of various kinds are perhaps as vivid as ever—electoral systems and democracy, the healthcare system and pandemic, the state carceral apparatus and racial violence, extractive infrastructures and climate change. Meanwhile, the specters of Church Rock and Marshall loom as an outgoing presidential administration approves new uranium mining on public lands in the West and Enbridge embarks upon massive new pipeline infrastructure projects in the Midwest—each in the name, perversely, of progress and security. This continuation of the very practices that have produced our present crises prompts us to think not just in terms of the infrastructure *of* emergency but also in terms of infrastructure *as* emergency. The essays gathered here and in our companion special issue of *Resilience: A Journal of the Environmental Humanities* document several iterations of that convergence, helping us to grapple with infrastructure's position at the heart of struggles over world-making from the eighteenth century to the present. In these essays, infrastructure comes alive as a site of attachment, a form of relation, and a shifting improvisation toward a future that the present's infrastructures of/as

Downloaded from http://read.dukeupress.edu/american-literature/article-pdf/93/3/345/953777/345hurley.pdf
by guest

emergency do not entirely foreclose. But if infrastructure is always, as Anne Spice (2018: 47) observes, "assembled in the service of worlds to come," those worlds need not be the ones imagined by racial capitalism with its insatiable appetite for progress and growth at the expense of justice and reciprocity. We live in a time in which the things that bind us are shifting and many of us experience this, rightly, as an emergency. But LaDuke and Cowen remind us that, on the ground, those who have been harmed by or excluded from the benefits and advantages of "Wiindigo infrastructure" continue, as they always have done, to create communities of care, to imagine and build infrastructures otherwise.

Jessica Hurley is assistant professor of English at George Mason University, where she teaches speculative fiction, critical theory, and the environmental humanities, and the author of *Infrastructures of Apocalypse: American Literature and the Nuclear Complex* (2020). She is currently working on her second book project, "Nuclear Decolonizations."

Jeffrey Insko is professor of English at Oakland University in Michigan, where he teaches courses in nineteenth-century American literature and culture and the environmental humanities. He is the author of *History, Abolition, and the Ever-Present Now in Antebellum American Writing* (2019). He is currently completing a book titled "Untimely Infrastructure: The 2010 Marshall, Michigan Oil Spill in the Human Epoch."

Notes

1 For an overview of the damage and a critique of the cleanup so far, see Fettus and McKinzie 2012.
2 For a full account of the Enbridge spill, see "The Dilbit Disaster" (2012), a series of articles published by reporters Elizabeth McGowan, Lisa Song, and David Hasemyer in *Inside Climate News*. The series won the Pulitzer Prize in 2013. https://insideclimatenews.org/news/26062012/dilbit-diluted-bitumen-enbridge-kalamazoo-river-marshall-michigan-oil-spill-6b-pipeline-epa/.
3 We have in mind Timothy Mitchell's well-known account in *Carbon Democracy: Political Power in the Age of Oil* (2011).
4 For an account and critique of infrastructure's promises, see Appel, Anand, and Gupta 2018.
5 For additional Indigenous critiques of crisis and apocalypticism, see Simpson 2017 and Mitchell and Chaudhury 2020.
6 Keller Easterling (2014) uses the term "disposition" to name infrastructure's capacity to determine how things will go; infrastructure can be dispositioned to produce certain outcomes, and perhaps redispositioned to produce others.

Downloaded from http://read.dukeupress.edu/american-literature/article-pdf/93/3/345/953777/345hurley.pdf
by guest

7 As Reuben Martens and Pieter Vermeulen (2021) note in their essay in the issue of *Resilience* that makes up the other half of this special issue, imagining infrastructure as a form of continuity that can get us to the future that we want is an important alternative to the impasse of infrastructure that can see only its immovable rigidity or its spectacular destruction.

8 We take the term *temporal drag*, of course, from Elizabeth Freeman (2010: 62), who uses it to index "the pull of the past on the present." While for Freeman temporal drag is (or can be) a reparative practice in queer life, we see (in our reading of Evans's work) infrastructure as a materialization of temporal drag that binds Black and other dispossessed subjects to the ongoing conditions of violent pasts.

References

Appel, Hannah, Nikhil Anand, and Akhil Gupta. 2018. "Introduction: Temporality, Politics, and the Promise of Infrastructure." In *The Promise of Infrastructure*, edited by Nikhil Anand, Akhil Gupta, and Hannah Appel, 1–38. Durham, NC: Duke Univ. Press.

Brugge, Doug, Jamie L. deLemos, and Cat Bui. 2007. "The Sequoyah Corporation Fuels Release and the Church Rock Spill: Unpublicized Nuclear Releases in American Indian Communities." *American Journal of Public Health* 97, no. 9: 1595–1600.

Chakrabarty, Dipesh. 2009. "The Climate of History: Four Theses." *Critical Inquiry* 35, no. 2: 197–222.

Davis, Thomas S. 2021. "'Far from the Gulf Coast, But Near it Too': Art, Attachment, and Deepwater Horizon." *Resilience: A Journal of the Environmental Humanities* 8, no. 3.

Dempsey, Dave. 2001. *Ruin and Recovery: Michigan's Rise as a Conservation Leader*. Ann Arbor: Univ. of Michigan Press.

Easterling, Keller. 2014. *Extrastatecraft: The Power of Infrastructure Space*. London: Verso.

Environmental Protection Agency (EPA). n.d. "United Nuclear Corp. Church Rock, NM: Cleanup Activities." https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.cleanup&id=0600819 (accessed January 8, 2021).

Fettus, Geoffrey H., and Matthew G. McKinzie. 2012. "Nuclear Fuel's Dirty Beginnings: Environmental Damage and Public Health Risks from Uranium Mining in the American West." *Natural Resources Defense Council*, March. https://www.nrdc.org/sites/default/files/uranium-mining-report.pdf.

Freeman, Elizabeth. 2010. *Time Binds: Queer Temporalities, Queer Histories*. Durham, NC: Duke Univ. Press.

Gilmore, Ruth Wilson. 2007. *Golden Gulag: Prisons, Surplus, Crisis, and Opposition in Globalizing California*. Berkeley: Univ. of California Press.

Downloaded from http://read.dukeupress.edu/american-literature/article-pdf/93/3/345/953777/345hurley.pdf
by guest

Gómez-Barris, Macarena. 2017. *The Extractive Zone: Social Ecologies and Decolonial Perspectives*. Durham, NC: Duke Univ. Press.

Hurley, Jessica. 2020. *Infrastructures of Apocalypse: American Literature and the Nuclear Complex*. Minneapolis: Univ. of Minnesota Press.

LaDuke, Winona, and Deborah Cowen. 2020. "Beyond Wiindigo Infrastructure." *South Atlantic Quarterly* 119, no. 2: 243–68.

Larson, Eric et al. 2020. *Net-Zero America: Potential Pathways, Infrastructure, and Impacts* (interim report). Princeton University, December 15. https://environmenthalfcentury.princeton.edu/sites/g/files/toruqf331/files/2020-12/Princeton_NZA_Interim_Report_15_Dec_2020_FINAL.pdf.

Levine, Caroline. 2015. *Forms: Whole, Rhythm, Hierarchy, Network*. Princeton, NJ: Princeton Univ. Press.

Marshall, Kate. 2013. *Corridor: Media Architectures in American Fiction*. Minneapolis: Univ. of Minnesota Press.

Martens, Reuben, and Pieter Vermeulen. 2021. "Infrastructural Prolepsis: Contemporary American Literature and the Future Anterior." *Resilience: A Journal of the Environmental Humanities* 8, no. 3.

Mitchell, Audra, and Aadita Chaudhury. 2020. "Worlding Beyond 'the' 'End' of 'the World': White Apocalyptic Visions and BIPOC Futurisms." *International Relations* 34, no. 3: 309–32.

Mitchell, Timothy. 2011. *Carbon Democracy: Political Power in the Age of Oil*. London: Verso.

National Transportation Safety Board. 2012. *Enbridge Incorporated Hazardous Liquid Pipeline Rupture and Release, Marshall, Michigan, July 25, 2010*. Pipeline Accident Report NTSB/PAR-12/01. Washington, DC. https://www.ntsb.gov/investigations/AccidentReports/Reports/PAR1201.pdf.

Robbins, Bruce. 2007. "The Smell of Infrastructure: Notes toward an Archive." *Boundary 2* 34, no. 1: 25–34.

Rubenstein, Michael, Bruce Robbins, and Sophia Beal. 2015. "Infrastructuralism: An Introduction." *Modern Fiction Studies* 61, no. 4: 575–86.

Simpson, Leanne Betasamosake. 2017. *As We Have Always Done: Indigenous Freedom through Radical Resistance*. Minneapolis: Univ. of Minnesota Press.

Spice, Anne. 2018. "Fighting Invasive Infrastructures: Indigenous Relations against Pipelines." *Environment and Society* 9, no. 1: 40–56.

Truscello, Michael. 2020. *Infrastructural Brutalism: Art and the Necropolitics of Infrastructure*. Cambridge, MA: MIT Press.

Voyles, Traci Brynne. 2015. *Wastelanding: Legacies of Uranium Mining in Navajo Country*. Minneapolis: Univ. of Minnesota Press.

Whyte, Kyle Powys. 2021. "Against Crisis Epistemology." *Handbook of Critical Indigenous Studies*, edited by Brendan Hokowhitu, Aileen Moreton-Robinson, Linda Tuhiwai-Smith, Steve Larkin, and Chris Andersen, 52–64. London: Routledge.

Downloaded from http://read.dukeupress.edu/american-literature/article-pdf/93/3/345/953777/345hurley.pdf
by guest