Introduction

Reading for Infrastructure

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In early February 2020, as we were writing this introduction, the Royal Canadian Mounted Police (RCMP) violently raided the Unist'ot'en Camp in unceded Wet'suwet'en territory, where Indigenous people had for a decade been blocking roads and bridges to prevent the construction of new oil and gas pipelines. While some of these projects had been canceled as a result of these actions, this raid was intended to clear the path for the building of the $6.6 billion Coastal GasLink Pipeline, which would carry fracked natural gas from northern British Columbia to a liquefaction plant on the coast. The police raid sparked dozens of solidarity actions across Canada, and protesters mobilized to shut down roads, rail lines, and ports from Vancouver to Halifax, with the multiplication of blockades effectively paralyzing passenger and freight traffic across much of the country.[1]

Although these blockades form part of a broad struggle against what the anthropologist Anne Spice calls "invasive infrastructures," with echoes across the Americas and beyond, they are not against infrastructure as such.[2] Rather, they articulate a politics against a world structured by the material needs and interests of fossil capital. In preventing pipeline construction, the blockades in fact propose an alternative vision of infrastructure tangled up with and enabling different "forms of life" (Jennifer Wenzel, this issue) that for their part also function as "infrastructures of decolonization."[3] They also unsettle what counts as infrastructure. As Freda Huson, the spokesperson of the Unist'ot'en Camp, explained to Spice, the route of the pipeline passed through the clan's best berry patches, which help to sustain not only the First Nations people who inhabit those lands but also the region's expanded ecosystem that links people and berries to streams, salmon, and bears. "All of that is

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part of the system that our people depend on, and that whole cycle and system is our critical infrastructure, and that's what we're trying to protect, an infrastructure that we depend on. And industry and government are pushing these projects that would destroy that critical infrastructure, most important to our people." What Huson calls "our critical infrastructures," which sustain forms of life that are antagonistic to accumulation, are threatened by the "critical infrastructures" of racial capitalism.[4]

An Infrastructural Turn

Huson's insights about infrastructures as key sites of struggle, vectors of social war, and the material conditions of possibility for often antagonistic worlds resonate with the expanded sense of infrastructure coming out of the self-declared "infrastructural turn" that has particularly marked the discipline of anthropology in the past decade or two.[5] This has involved a two-headed extension of infrastructure. On the one hand, material infrastructures themselves—pipelines, railroads, sewage and water systems, roads, landmines, grain silos—have been taken up more vigorously as significant objects of ethnographic study. On the other hand, this engagement with material forms has generated new theoretical reflections with infrastructure as a critical concept in ways that exceed previous mobilizations of infrastructure as a metaphor in critical theory. AbdouMaliq Simone, for example, has proposed that we understand people in cities like Lagos, Dakar, and Kinshasa, where certain material infrastructures are lacking, as being themselves infrastructural insofar as "their selves, situations, and bodies bear responsibility for articulating different locations, resources, and stories into viable opportunities for everyday survival."[6] Similarly, Julia Elyachar suggests that the practices of gossiping and chatting undertaken by women in Cairo be understood infrastructurally to the extent that they lay down the grooves through which financial arrangements later flow.[7] And in Stefanie Graeter's work, low-income port residents in Peru are understood to function as unwitting vessels of toxic storage for the lead generated by the pathways of metal commodity chains.[8] In each of these cases, infrastructure is taken up as a theory-metaphor to do new kinds of analytic work.

In the humanities, one of the most sustained bodies of work using the concept of infrastructure has addressed media, beginning perhaps with Marshall McLuhan's *Understanding Media* (1964). Without using the term "infrastructure" specifically, McLuhan extended the notion of media to encompass the workings of electricity, railroads, and airplanes alongside examples of the alphabet, typography, money, television, and radio as extensions of the human body that changed the scale, pace, and forms of association between members of society. Thus media can be

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understood as infrastructural or, alternately, as dependent on a variety of other infrastructures, whether material, social, or institutional. In this vein, Lisa Parks and Nicole Starosielski position their edited volume *Signal Traffic* (2015) as demarcating "a critical shift away from the analysis of screened content alone and toward an understanding of how content moves through the world and how this movement affects content's form."[9] The various essays in *Signal Traffic* take up the study of the material infrastructures that make possible the circulation of media content, such as underwater cables, data centers, and processes of compression as well as "soft infrastructures" like daily routines, marketing, and knowledge practices.

Our call for a seminar entitled "Thinking Infrastructure" for the American Comparative Literature Association's 2018 conference, on which this special issue is based, invited participants to take up the challenges and opportunities that infrastructural thinking posed in methodological and theoretical terms beyond this more established vector of media infrastructure studies. As scholars based in literary and cultural studies, we were looking for interventions that did not stop at the question of how infrastructures were represented in, say, literature or film.[10] We were also interested in the traffic and effect of fictive forms on the social forms and fictions of infrastructures themselves. Additionally, as Latin Americanists interested in the Americas more broadly, we were also hoping for work that would confront infrastructure as marked by colonial, neocolonial, and settler colonial relations, and engaged with subaltern social formations, heterogeneous temporalities, and the history of racial capitalism with its uneven processes of accumulation and extraction. For this reason, too, we explicitly had in mind a longer temporal frame that could account for the Americas' early insertion into these historical processes, pushing against the narrower association of certain material infrastructures with conventional periodizations of modernity and technology rooted in the long nineteenth century.

"To be modern," wrote Paul N. Edwards in an influential 2003 essay, "is to live within and by means of infrastructures."[11] This vision of infrastructural modernity is rooted in the global North, where infrastructures tend to operate as "an invisible, smooth-functioning background." The situation is very different in the global South, Edwards observed, where infrastructures frequently fail, become unusable, or do not even exist. Two decades later, with rampaging climate change and infrastructural collapse increasingly apparent, it is worth questioning whether this framework still holds. Yet Edwards also acknowledged that the infrastructural norms of the global South are "equally 'modern,'" which again begs the question of what modernity means, and how it relates to infrastructure.[12]

The anthropologist Brian Larkin points out that the "unbearable

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modernity" of infrastructure is conceptually rooted in Enlightenment thought, specifically in the ideological association between the circulatory work of infrastructure and the ideas of progress and freedom.[13] Even so, infrastructure also calls our attention to the temporal continuities and breaks that structure relations of path dependency. On the one hand, tracing fiber optic cables and railroads back to the cow paths over which they were more or less smoothly layered, for example, makes these exemplary condensations of modernity appear less "revolutionary" than is commonly assumed. On the other hand, attending to infrastructures can also help to track the inauguration of new epochs, as they carve paths that enable radically new or divergent futures. In *The Accumulation of Capital* (1913), Rosa Luxemburg famously argued that capitalism's conquest of noncapitalist societies "begins in most cases with magnificent constructions of modern transport, such as railway lines which cross primeval forests and tunnel through the mountains, telegraph wires which bridge the deserts, and ocean liners which call at the most outlying ports."[14] Here primitive accumulation works through colonizing infrastructures that configure a spatial order of extraction while consequently delineating a temporal rupture.

From the vantage point of the Americas, this argument dovetails with the view of world-systems and world-ecology theorists that racial capitalist modernity ought to be thought not from the Enlightenment or industrial revolution on, as with infrastructure critics who focus on large technical systems, but from the long sixteenth century, which laid their historical foundations.[15] An "assemblage of colonial infrastructures," including cities, forts, ports, and roads, was already weaving the Americas into a globalized world by the late sixteenth century, while the contemporaneous emergence of new systems of classification, quantification, standardization, and rationalization formed part of the "symbolic, cultural, and scientific processes central to modernity's reworking of the *oikeios*."[16] This special issue thus asks what infrastructural modernity looks like if we start from the slave ship rather than the railroad, for example, or place the electrical grid alongside the chain gang.[17]

One outcome of this approach is an expansion of what it might mean to conjugate reading and infrastructure: reading as infrastructure, reading infrastructure, and readings of infrastructure. The essays that follow work with the critical possibilities of reading things as functioning infrastructurally, a move that positions infrastructure not so much as a thing but an analytic. This option follows Larkin's argument that infrastructures are not simply "out there," so that any discussion of infrastructure is necessarily a "categorical act." He uses the example of the entangled relations between electricity and computers (each of which could be said to be infrastructural to the other), as well as software protocols and the educational and cultural competence needed to operate such systems. For

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Larkin, calling something infrastructure is a decision that involves "tearing into . . . heterogeneous networks to define which aspect of which network is to be discussed and which parts will be ignored."[18] The point is not that everything is now infrastructure or that infrastructure is the dominant category of life but that reading for infrastructure might yield unexpected insights. Analyzing something as if it were infrastructural, for example, affords new ways to think about relationality.

It is not only that, as Alan Liu suggests, infrastructure offers a "purchase on social complexity," like Raymond William's keyword "culture."[19] A different kind of complexity is at stake. To consider berry patches or pipelines as part of culture integrates them into a larger field, a more or less organically experienced whole, and gestures perhaps to the meaning they are made to bear, and their imbrication with other symbolic practices. But it does not specify anything further about the lines of force to which they are subject, or their effect or position within a larger distributed assemblage. To consider them in terms of infrastructure, on the other hand, implies attending to their positionality within a set of colonial/capitalist relations.

The anthropologist Ashley Carse observes that what distinguishes infrastructure from neighboring terms like "system" or "network" is that, while all are collective nouns denoting "a plurality of integrated parts," infrastructure diverges from the other terms by "suggesting relationships of depth or hierarchy."[20] The network imaginary that, for Patrick Jagoda, has become "the principle architecture and most resonant metaphor of the globalizing world" foregrounds attention to lateral connectivity, to decentered, distributed, or nonsovereign modes of operation and "nonhierarchical models of connections."[21] While infrastructure is also a netlike system, however, it is both more topographical and more temporal: analytically, one focuses not only on what is brought into relation through infrastructure but also its sequential placement in terms of what it configures or enables. This is a legacy of infrastructure's origins as an organizational and accounting term deployed in nineteenth-century French civil engineering to identify construction work that was conducted physically beneath or organizationally prior to unlaid railroad tracks, such as roadbeds, surveys, or embankments.[22] Insofar as it is associated with that which undergirds, is within, or is prior to something else, infrastructure is also marked by what Jennifer Wenzel calls its "transitivity": its function is to allow something else to happen, or to prevent it from happening. And still, as Carse also explains, for all its conceptual plasticity, infrastructure's "common referents" (roads, pipes, rails, cables) have an "undeniable materiality" that further set it apart from networks.[23] As an analytic, infrastructure lends such material effects even to what are less easily identified as material realities: to call gossiping in the markets of Cairo "phatic

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labor," with Elyachar, and to claim that it works infrastructurally like channels through which economic benefits are then funneled, is to turn it into a "thing," drawing attention to its world-making capacities.[24]

Infrastructure is not just a network then: but neither is it just structure. The "infra" that denotes its placement within or beneath also indicates a supposition that it recedes into the background, becoming simply part of the environment. If some critics associate infrastructuralism with a weaker form of determinism than structuralism, it may have something to do with the open-endedness of infrastructures, their plurality and orientation toward dispersed connectivity. Rather than determinism, infrastructures set up what the architect Keller Easterling calls "disposition," or "an unfolding relationship between potentials."[25] Easterling uses the example of a ball on an inclined plane to illustrate this concept. Even if it has not yet begun to roll, the ball nevertheless possesses a potential that is immanent in the relationship between itself and the plane. Within this relationship, of course, the ball will tend to move in particular ways, even if it does not end up moving in the same way every single time. Moreover, how the ball moves will make visible the complex dispositions embedded in or composing the environment—these movements are "signs of ongoing processes—like the ripples used for river navigation."[26] The worlds that infrastructures help assemble are designed for or oriented toward particular ends—the ceaseless accumulation of capital, the control of bodies, the formation of subjects, the management of populations, and so on—although their effects also exceed them.

Worlds Made and Broken

As the Wet'suwet'en land defenders make clear, when infrastructures make worlds with certain dispositions and facilitate certain "forms of life," they break others, dismantling existing patterns of flows and relations and encouraging or effecting their replacement. In *A Billion Black Anthropocenes or None*, Kathryn Yusoff writes that "the end of this world has already happened for some subjects, and it is the prerequisite for the possibility of imagining 'living and breathing again' for others."[27] Conventionally, infrastructure is imagined via the continuous provision of public goods such as water, electricity, and waste management. In this frame, infrastructural violence takes the form of exclusion (as when Detroit residents' electricity is cut off), while inclusion (turning the electricity back on) implies the negation of this violence. But infrastructure also effects violence through inclusion, by bringing people, communities, and territories into the fold of an exploitative, extractive, or genocidal social order. It is these "invasive infrastructures" that numerous social movements, often led by Indigenous people, are fighting against across the Americas,

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from Wet'suwet'en territory to Standing Rock to Chiapas.[28] Drawing on a formulation from Ruth Wilson Gilmore, we could say that the worlds that infrastructures assemble distribute premature death unevenly, that is, they are both racist and racializing systems.[29] And the relation between infrastructure and racialization runs through this special issue explicitly. On the one hand, infrastructure materializes and contributes to the reproduction of the violent logics of an already existing racial order; while on the other hand, infrastructure can also be understood as itself productive of race.[30] The early Portuguese slave ship produced social differentiation in part through the uneven distribution of death, for example, while the roads built by chain gangs in the US South in turn underwrite the logic of whiteness as freedom and self-determination. How might one notice, on the one hand, the forms of inertia set in motion by infrastructures—the work and weight of maintaining a certain status quo, that which they make happen or keep from happening—and, on the other, the forms of leakiness and ruination that nonetheless permeate these infrastructural systems?

Indeed, several essays unexpectedly converge around Steven Jackson's injunction for a "broken world thinking," where the starting point is an assumed positionality in an aftermath, rather than a forward-looking orientation: the inheritance of an old and layered world, a fractal and "always-almost-falling-apart world."[31] But if the central claim for Jackson is that infrastructures are to be understood as not functioning perfectly, as constantly breaking down and thus in need of ongoing repair, these essays tend to think the possibilities of repurposing debris and detritus so as to generate new configurations. This is not piecing the "broken world" back together—since the worlds built by many modern infrastructures, even in ideal conditions, break bodies and ruin lives—but instead making use of fissures and flaws to build the conditions for other worlds and forms of life to emerge.

Given the simultaneous world-making and world-breaking functions of infrastructures, this special issue extends the challenge to the "invisibility thesis" central to early infrastructure studies. In contrast to the "network imaginary" declaratively configuring twenty-first-century social life, infrastructures were assumed to become "black-boxed" over time so as to fade imperceptibly into the background as they enabled something else to take place, becoming visible only when they break, as Susan Leigh Star put it in a field-defining article.[32] But the invisibility thesis, as Larkin and others have already argued, can also be politically inattentive because it holds mainly for socially privileged subjects who can afford to take infrastructure for granted or for whom infrastructure works.[33] In terms of reading for infrastructure, pushing further on the invisibility thesis means that rather than simply performing a figure-ground reversal, one probes the very distribution, management, and distinction between what is deemed "figure" and

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"ground," or setting and plot, depending on one's location. These essays bring into view the vantage point of populations that may be excluded or detached from the circulatory systems of infrastructure, or whose worlds are damaged by their inclusion into them, as well as those who have to work to build, operate, maintain, or repair infrastructure and for whom therefore it is never part of a functioning background or substrate. Additionally, the essays also raise differential relationships to modern infrastructure projects on the part of nation-states, north and south, across different latitudes of development, as witnessed in George F. Flaherty's study of the anxious reach of the Mexican state to deploy infrastructural formations on territorial borders that might strengthen feelings of national identification where there is a perceived deficit.

Finally, these essays variously probe the affective, imaginary, or fictional registers of material infrastructures beyond what, following Larkin, anthropologists have analyzed as infrastructure's "poetics," as well as how these registers can be taken up or refracted in cultural forms.[34] That is, in addition to reading new things as infrastructure, this issue also suggests new ways to read infrastructure or to engage with readings of infrastructure, a traffic between the infrastructural and the aesthetic or fictive that goes beyond the question of how infrastructure is represented. Material infrastructures can be read as semiotic, aesthetic, and affective vehicles in addition to the concrete technical function they are meant to fulfill. They can condense signification within an ideological landscape, underwriting fantasies of speed, safety, or modernity when they function, or signaling ruin and belatedness when they do not.[35] Like the novels and newspapers in Benedict Anderson's classic account of national imaginaries, tunnels, roads, and border infrastructures can be modes of imagining the national community and producing state forms.[36] And if, as Wenzel points out, "well-functioning infrastructure is itself a kind of fiction, an unfulfilled promise" (Jennifer Wenzel, this issue), then it also has a grammar, a plot, and a narrative form, in addition to an aesthetic dimension. A ship or tunnel carries with it a rhetoric of stasis and mobility. And the plots or chronotopes projected by infrastructures show up in particular relief when they go awry, as in unbuilt or unfinished infrastructures like the Trans-Saharan Railway, which live on in shadow histories.[37] Novels or speculative work might bolster the cultural scripts written into infrastructure, spreading in a different register the regimes of perception, logic, and affective address of certain infrastructural projections while consolidating their silences. On the other hand, they may also talk back to the futures promised or threatened by infrastructure, unsettling or remaking the aesthetics and sense-making capacities of borders, electric grids, or oil rigs. The particular practices of writing—genres, tropes, intertextuality—or language itself might be understood to function infrastructurally.

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To follow one line in more detail, one possibility that emerges here is that, if infrastructure itself is a kind of fiction, it is a "realist" fiction, one that not only projects a desired world but also aims to produce certain "reality effects" by actively designing and composing a world. If it is speculative, this speculation is "firmative" rather than "affirmative"—to borrow terms from Juan Llamas-Rodriguez's essay—in its attempts to contain risk, foreclose potentialities, and solidify the possibilities of the future. We might remember Edward Said's designation of colonial discourse as "radical realism," where its authoritative address renders a new reality simply by designating, pointing to, fixing, or using the copula "is": thus the wall is the border between two distinct territories, the road is how one travels from point A to point B, accessing electricity is how one participates in a realm of light, power, and connection.[38] The claims that oil must flow through pipelines and that berry patches are not worth protecting can also be seen as a form of radical realism. These claims are world-building; as Easterling suggests, stories are "active forms" that can "inflect disposition in infrastructure space."[39]

In contrast to these reality effects, several of the essays here focus on how visual artists or writers might be said to "derange" realism, rerouting the spaces, temporalities, and forms of connectivity that are sedimented through infrastructures. As Llamas-Rodriguez explores in his essay, Edwin Agudelo's *A Practice in Excavating and Envisioning Ambos Nogales* rethinks the role of border tunnels as public spaces, not only for the present but also for the future. For Wenzel, China Miéville's "weird tale" "Covehithe" mobilizes the literary imagination to depict sunken oil platforms as revenant, reproducing organisms that pose new questions about relationships among humans, nature, and technology, and about the care, responsibility, and politics such forms of life demand. Susan Zieger closes her essay with the magic and illusion that form Black escapology (one appropriated by Harry Houdini) as staging a drama of fugitivity that eschews the promise of roads built into white-authored chain gang narratives. And Sage Gerson analyzes how Ralph Ellison's "electrification" *Invisible Man* unwrites cultural and historical narratives shaping how electricity is perceived in US culture, particularly in terms of its relationship with race. As a whole then, these essays raise the possibility, as Wenzel suggests, that there might be a singular capacity of "cultural objects, including literary fiction, photographs, and film, to reckon more radically with infrastructure as a lifeform."

Grammars of Infrastructural Modernity

Any collection of essays will inevitably involve a certain amount of contingency, yet the contributions included here not only converge on the

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deployment of infrastructure as an analytic but also cluster around three key themes that open onto the imbrication of infrastructure and racial capitalism. The first is slavery. We begin with Anna More's "The Early Portuguese Slave Ship and the Infrastructure of Racial Capitalism," which takes up a foundational infrastructure for the formation of racial capitalist modernity. For More, *reading* the slave ship *as infrastructure* demands an engagement not only with logistics and circulation but also with production, specifically the production of social difference or racialization. By packing human captives into the holds of merchant caravels designed to carry nonhuman commodities, the spatial regime of the slave ship configured asphyxiation as a form of death to which only the enslaved were exposed. At the same time, free African sailors known as *grumetes*, whose knowledge and labor were crucial to the functioning of these ships, were inserted into a debt economy that drew the boundaries of racialized freedom. More stresses the material forms and practices through which infrastructures racialize and differentiate and underscores how the early slave ship constituted a key infrastructure for the transatlantic slave trade while establishing the parameters of racial capitalism over the *longue durée*.

Where More explores the infrastructural conditions of possibility for the rise of racial slavery, Susan Zieger's essay, "Back on the Chain Gang: Logistics, Labor, and the Threat of Infrastructure," turns to the institution's infrastructural afterlives. As in More's essay, what is at stake is the connection between logistics—the movement of goods and bodies for profit—and racialization, where infrastructures of mobility—in this case the road rather than the ship—are built on the immobility of certain bodies from which labor is extracted. And like More's essay, it also reads something as infrastructure that is not commonly perceived as such: chains. The historical phenomena of the chain gang in the US South becomes the conjunction of two infrastructural forms—the road and the chain—a figure that brings together how the racialized bodies that build and are objectified in the roads were denied the promise of movement and freedom associated with these infrastructures of circulation. Zieger reads the cultural script of the chain gang through accounts that attempted to bring it to national attention in assorted genres and media from memoir and novel to photography and film, paying particular attention to the way roads are attributed with meaning in the narratives and either expose or reenact a racial regime.

The management of circulation and containment, of flow and immobility, that converge in the institution of slavery and its afterlives is also at stake in the logic of the border, which is the concept that anchors the following two essays. Both of these essays, moreover, are exercises in *reading infrastructure*: in this case, border crossings and tunnels. George F. Flaherty's "'Anxious Desires': Hyperbolic Beautification and Affective Infra-

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structure under Mexico's National Border Program, 1961–1971" takes up the Mexican state's project to construct buildings, museums, and border crossings as part of its National Border Program (Pronaf) at a moment of economic transition. This network of spectacular late modernist architectures served not only to more tightly manage cross-border flows of people and commodities but also to demonstrate the "beauty" and "desirability" of "all things officially *Hecho en México*." Attending to its aesthetic and rhetorical foundations and expressions, Flaherty argues that the project constituted an affective infrastructure, designed not to disappear as a substrate but to hail *fronterizos*, stoking stronger feelings of national identification and encouraging them to support the national economy by satisfying their consumer needs and wishes with Mexican products rather than those obtained on the other side of the border.

Certain forms of design, then, can reinforce border imaginaries organized around nationality, accumulation, and security. Yet other forms, as Juan Llamas-Rodriguez argues in "Ruinous Speculation, Tunnel Environments, and the Sustainable Infrastructures of the Border," can interrupt these closed imaginaries and project more open-ended narratives of futurity. Llamas-Rodriguez analyzes the limits of contemporary speculative design projects about the border, particularly the lauded *Borderwall as Architecture* initiative that, despite its stated aims, ends up reinscribing the "infrastructuralizing imperative" to turn certain regions into state borders. By contrast, Edwin Agudelo's art project *A Practice in Excavating and Envisioning Ambos Nogales* stages the multivalent underground infrastructures of mobility that traverse the US-Mexico border, like smuggling tunnels and sewage systems, and the fugitive flows that they enable. The project gestures at a future world below, rather than beyond, current geopolitical formations and architectural structures. As a form of what Llamas-Rodriguez calls "ruinous speculation," Agudelo's project suggests that the openings for sustainable futures can be found in the failures of the present.

These failures, of course, can take many forms. To the extent that infrastructure's reach is uneven, failure for some can be synonymous with smooth functionality for others. Perhaps this is nowhere clearer than in the case of energy infrastructure and the churning fossil capitalism it fuels, around which the last two essays are clustered. These essays might also be said to take up more directly *readings of infrastructure*. Sage Gerson's "Siphoning and Sabotage: Ralph Ellison's *Invisible Man* and US Electricity Theft" turns to the electrical grid as both an infrastructural mediator of electrical power in the United States and a materialization of power itself. The essay triangulates three "electrifictions" focused on the relationship between Blackness and electricity: General Electric (GE)'s "electric slave" advertisements from the interwar period, news cover-

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age of electricity theft in Detroit in 2010, and Ellison's novel. Unlike the Detroit news coverage, Gerson's reading of Ellison's novel figures electricity siphoning as a form of retributive refusal that potentially "sabotages" systems of infrastructural ordering, reconfiguring particular infrastructural worlds and intervening in the current relationship between energy systems and sociocultural power structures.

Finally, in "Forms of Life: Thinking Fossil Infrastructure and Its Narrative Grammar," Jennifer Wenzel puts her long trajectory in the energy humanities into conversation with infrastructure studies in order to advance a narrative theory of infrastructure that includes a question about what it means to read infrastructure with the tools of literary analysis. Discussing China Miéville's short story "Covehithe," about oil rigs that have come to life and returned to shore to reproduce like ungainly, latter-day sea turtles, she explores how cultural objects differ from built environments in thinking infrastructural forms of life: both the vitality, for example, that is imputed to fossil infrastructures themselves as well as modes of living gathered around certain energy infrastructures.

Taken together, this special issue extends the infrastructural turn in the humanities and proposes a method, or set of methods, that we have called "reading for infrastructure." These essays grapple with the grammars of infrastructural modernity and attend to the worlds its infrastructures configure and dismantle, the futures they promise and threaten, and the practices of reproduction and struggles for survival they generate in response, across multiple levels of scale. The deployment of infrastructure as a concept and a method of reading reaches, on the one hand, into the nonmaterial realm of discourse, visual representation, and artistic and symbolic practices where these are understood not as mimetic but as themselves participating in world-making endeavors. On the other hand, to read everything that is named infrastructure (even a berry patch) as also fictive or aspirational is to attend to the temporal arcs it projects, the forms of coherence built on it, the realisms it grounds, the protagonisms that accrete to it, the plots it builds, and the life-forms it sustains.

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Notes

1. Brown and Bracken, "No Surrender"; McClearn, "Back on Track."

2. Spice, "Fighting Invasive Infrastructures."

3. On "infrastructures of decolonization," see Karuka, *Empire's Tracks*, 36–37. Similarly, Glen Coulthard writes that the use of blockades by First Nations communities constitutes "both a negation and an *affirmation*," that is, they aim to disrupt capital accumulation in settler colonial society while also "embody[ing] an enactment of Indigenous law and the obligations such laws place on Indigenous peoples to uphold the relations of reciprocity that shape our engagements with the human and nonhuman world—the land" (*Red Skin, White Masks*, 170).

4. Spice, "Fighting Invasive Infrastructures," 40–41.

5. For an overview of this "turn," see Larkin, "Politics and Poetics of Infrastructure." See also Larkin, *Signal and Noise*; Carse, *Beyond the Big Ditch*; Harvey and Knox, *Roads*; Anand, Gupta, and Appel, *Promise of Infrastructure*; Appel, Anand, and Gupta, "Infrastructure Toolbox"; and Hetherington, *Infrastructure, Environment, and Life in the Anthropocene*.

6. Simone, *City Life from Jakarta to Dakar*, 154.

7. Elyachar, "Phatic Labor, Infrastructure, and the Question of Empowerment."

8. Graeter, "Infrastructural Incorporations," 22.

9. Parks and Starosielski, "Introduction," 1.

10. See, e.g., Michael Rubenstein's excellent *Public Works*, one of the only books to tackle thinking infrastructure through literature, which tends to the representations of waterworks and the electrical grid in Irish literature and how they emerge as vehicles for an Irish imagined community, a relationship of material connection and interdependence, a fiction that is either desired or rejected.

11. Edwards, "Infrastructure and Modernity," 186.

12. Edwards, "Infrastructure and Modernity," 188. See also Furlong, "STS Beyond the 'Modern Infrastructure Ideal.'"

13. Larkin, "Politics and Poetics of Infrastructure," 332.

14. Luxemburg, *Accumulation of Capital*, 366–67.

15. See, for example, Wallerstein, *Modern World-System I*; Quijano, "Coloniality of Power, Eurocentrism, and Latin America"; and Moore, *Capitalism in the Web of Life*.

16. Nemser, *Infrastructures of Race*, 19; Moore, *Capitalism in the Web of Life*, 79.

17. In addition to the world-systems-inspired approaches referenced above, our framing of infrastructural modernity is indebted to scholarship in the Marxist and Black radical traditions, including the work of W. E. B. Du Bois, Eric Williams, C. L. R. James, Cedric Robinson, and Robin Blackburn, which situates Atlantic slavery as what Du Bois called the "foundation stone" of the modern capitalist world. See Du Bois, *Black Reconstruction*, 5; Williams, *Capitalism and Slavery*; James, *Black Jacobins*; Robinson, *Black Marxism*; and Blackburn, *Making of New World Slavery*. More recent scholarship in the field of US history has attended to the history of capitalism and, specifically, its entanglement with slavery in rich, empirical detail. For a helpful discussion of this historiography, see Beckert and Rockman, "Introduction: Slavery's Capitalism." For the most part, however, infrastructure—as an object or an analytic—has received little sustained attention in this scholarship. Two recent exceptions are essays by Archie Davies and Eric Kimball, exploring the articulations, respectively, between British capital and the circulatory infrastructures of nineteenth-century Recife, Brazil, and between industry in New England and the infrastructures of slavery in the West Indies during the seventeenth and eighteenth

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centuries. See Davies, "Coloniality of Infrastructure"; and Kimball, "'What Have We to Do with Slavery?'"

18. Larkin, "Politics and Poetics of Infrastructure," 330.

19. Liu, "Toward Critical Infrastructure Studies," 2; Williams, *Keywords*, 76–82.

20. Carse, "Keyword: Infrastructure," 27.

21. Jagoda, *Network Aesthetics*, 3–4.

22. Carse, "Keyword: Infrastructure," 29.

23. Carse, "Keyword: Infrastructure," 35.

24. Elyachar, "Phatic Labor, Infrastructure, and the Question of Empowerment," 455.

25. Easterling, *Extrastatecraft*, 72.

26. Easterling, *Extrastatecraft*, 73.

27. Yusoff, *Billion Black Anthropocenes or None*, 12–13.

28. Spice, "Fighting Invasive Infrastructures."

29. Gilmore, *Golden Gulag*, 28. Brian Whitener draws on Gilmore's work to analyze the racialized politics of infrastructure in Detroit. See Whitener, "Detroit's Water Wars."

30. Nemser, *Infrastructures of Race*.

31. Jackson, "Rethinking Repair," 222.

32. Jagoda, *Network Aesthetics*; Star, "Ethnography of Infrastructure," 382.

33. Larkin, "Politics and Poetics of Infrastructure," 336.

34. Specifically, Larkin draws attention to the doubled effect of material infrastructures where they fulfill a technical function even as they work as "concrete semiotic and aesthetic vehicles oriented to addressees." As poetic vehicles, infrastructures not only draw on and convey fantasies and desires but also generate a "sensory apprehension of existence," like the experience of speed, smoothness, or cold (Larkin, "Politics and Poetics of Infrastructure," 329, 338).

35. This approach is closer to Jagoda's study of the adjacent term "network," where his concern is to understand the ways narrative and visual forms as well as games offer a sharpened analytical perspective on the networks dominating twenty-first-century social life, from social media to banking interfaces (Jagoda, *Network Aesthetics*).

36. Anderson, *Imagined Communities*.

37. Carse and Kneas "Unbuilt and Unfinished," 16.

38. Said, *Orientalism*, 72.

39. Easterling, *Extrastatecraft*, 90.

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