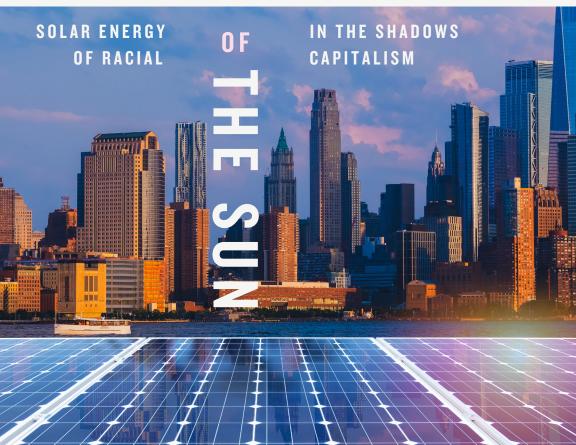
SUBJECTS



SUBJECTS OF THE SUN



ELEMENTS A series edited by Stacy Alaimo and Nicole Starosielski

DUKE

SUBJECTS OF THE SUN

SOLAR ENERGY IN THE SHADOWS OF RACIAL CAPITALISM

MYLES LENNON



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This book is dedicated to my family—Movah, Chaz, and Luke (*sleeypang!*)—and the ancestral homelands of the Lenape people (known to many of us as New York City).



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At its core, this is a book about different people's responses to climate change. But it is focused less on planet Earth and more on Google Earth, less on power plants and more on PowerPoints, less on melting ice sheets and more on making spreadsheets. This emphasis on everyday "screenwork" might seem misaligned with the grave matter of environmental collapse. But the greatest existential threat to life on earth is quite often experienced through life in the cloud. While we don't need digital mediation to grasp the ever-present consequences of a warming world—especially in communities of color—online visuals and screenwork enable a wide range of people to understand and engage with the empirical fact of anthropogenic carbon emissions as well as the massive energy infrastructure that drives those emissions. Indeed, many of us in the Global North encounter the ubiquitous electricity generation system that powers our lives not through direct experience but through datafication.

Yet the civic discourse on energy transitions often focuses on policies, financial instruments, and political will, overlooking the everyday ways in which activists, technocrats, and laypeople actually go about transforming energy infrastructure through virtual and visual media. This elision matters because in a "society of the spectacle," such media often distort, obfuscate, and maintain the extractive order of racial capitalism, leaving us more alienated from the very world that clean energy is supposed to heal. Subjects of the Sun thus looks critically at the quotidian visual interfaces of community organizers and white-collar technologists, Black anticapitalists and white neoliberals, environmental justice nonprofits and cleantech corporations—an array of differently positioned actors united by their commitment to clean energy futures. In doing so, this book illuminates the underacknowledged disjuncture between utopic visions for solar power and the banal digital routines through which so many of us try to make those visions real.

Admittedly, I feel some guilt writing a book about renewable energy



—a vaunted climate solution—that focuses critically (some might say obsessively) on minute matters like the aesthetics of an Instagram post. The present political moment only accentuates the ostensible folly of this exercise. I write this on the precipice of a second Trump administration—a ruling regime that will almost certainly dismantle environmental regulations, weaken the renewable energy industry, and discard environmental justice protections. While most of the fieldwork for this book took place during the first Trump administration, the heightened stakes this time around point to the need for multiscalar political action, not myopic media analysis. As a concerned climate activist and scholar, I can surely find more productive things to do than nitpick over how a solar corporation uses Google Earth. Except . . . I'm not so sure. After years of working as a sustainable energy policy advocate and conducting fieldwork for this book, I have found that the digital platforms that my colleagues, interlocutors, and I use to transform environments that we otherwise have limited relations with are perhaps as symptomatic of our climate challenges as a corrosive fossil fuel refinery in a poor neighborhood, or the frightening weather events that increasingly harm marginalized communities. Tending to this alienation requires a close look at the screen-based world that the energy transition operates in. At first glance, then, this book's ethnographic documentation of solar's virtual and visual imprint might seem disconnected from the urgent material imperatives of renewable energy (e.g., reducing life-threatening emissions that disparately impact communities of color). But it is precisely this disconnect that I hope to destabilize by theorizing the paradoxically two-dimensional nature of a profoundly physical transformation in electricity generation.

While Subjects of the Sun does not address the incoming administration's plans to impede this transformation, these plans are all the more reason for disentangling the energy transition from an insidious mediascape that aided the rise of Trump and his extractivist policies. Put differently, both progressive digital activism and the politics of viral misinformation depend on screenwork, and while these contiguous dependencies don't mean we should wholly unplug our efforts, they underscore the need for an energy transition that is not fully enmeshed in a virtual decarbonization paradigm in which power is concentrated in our laptops.

This argument is rooted in an understanding that energy infrastructure is not just a material force but also an ideological force. As Timothy Mitchell has documented, the materiality of fossil fuels—their spatial-

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ity, movability, and extractability—directly shapes political possibilities and social imaginaries. Subjects of the Sun expands on this analysis, illuminating how solar electricity materializes through an interconnected physical landscape and digital mediascape in ways that simultaneously upend and uphold the political order of fossil fuels. I contend that reckoning with this unsettling simultaneity can usher in a more radical energy transition centered on reconfiguring our relations with the spaces that solar is supposed to safeguard—the environmental senses and sensibilities that screenwork neglects.

This book is therefore quite critical of hegemonic environmental stewardship and its hardworking, committed practitioners. At times it might even read like a smug exposé. But as someone who spent years in New York City's environmental policy ecosystem, I have zero interest in such ungenerous gotcha tactics. Instead, the book's targeted ethnographic analysis aims to uncover how the most mundane facets of digital life enable intelligent, competent, empathetic people to reproduce the structures of power that they wish to uproot. For my interlocutors have a sophisticated understanding of the world and often effectively enact change (they are not, for instance, the clueless technocratic dupes that James Ferguson encountered in Lesotho). But they remain ensnared in the underexplored contradictions of a late liberal mode of environmental stewardship that is arguably no less productive of environmental degradation than fossil fuels.⁵ Subjects of the Sun elucidates this paradoxical praxis with an eye toward an energy transition that is not so much immune to contradiction as attuned to that which digitalized carbon reduction obfuscates: the multifarious forms of life on the ground in even the most developed urban spaces. As I show in this book, moving from screenwork to the soil can help realize the transformative potential of energy generated directly from the luminescent orb in the sky that defines life as we know it.



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How odd it is to tour someone's living space without their consent. To see their kitchen when their apartment door is ajar, to view their vestibule and corridors as they leave their building for work. I couldn't shake this sense of impropriety, feeling like an unwelcome interloper as I walked in a group of spectators led by a professionally clad white man through the Marcus Garvey Apartments (MGA). MGA is a low-income housing complex in the poor Black community of Brownsville, Brooklyn. MGA loosely resembles the community where I grew up a few miles away in Queens—a space that would never attract a sightseeing tour. But MGA differs from all of New York City's housing complexes in one crucial way: it's home to one of the first solar-powered microgrids in the United States.

A microgrid is a small-scale power station that provides locally generated electricity (as opposed to centrally generated electricity) to a geographically bounded network of electricity users, enabling communities to be energy self-sufficient in the event of grid malfunction. Brownsville is perhaps the last place you'd expect to find such innovative infrastructure, as the neighborhood is marked by all the familiar indicators of structural violence—high incarceration rates, pervasive unemployment, poor public health statistics, and so on. Solar-powered microgrids, in particular, are complex and costly, requiring not only considerable financial investment but also technocratic aptitude, well-resourced institutions, and a stable built environment (e.g., intact rooftops)—assets that impoverished communities of color like Brownsville lack.

How, then, had MGA achieved something that even the most environmentally conscious wealthy white communities only dream of—not simply transitioning to renewable energy but also adopting cutting-edge climate-resilient infrastructure? And how could other poor communities of color follow their lead? These questions brought me and several of my activist comrades to MGA; we wanted to see, with our own two eyes, a beacon of an equitable sustainable future in the middle of the 'hood. We

all worked as either employees or volunteers for Environmental Quality for All, or EQUAL for short—an environmental justice (EJ) nonprofit in a low-income community of color resembling Brownsville. When we spoke with the white-run property management firm who owns MGA to arrange our visit, I didn't consider that the people who actually lived there would have no clue who we were. I was too preoccupied with the abstract concept of a Black solar-powered utopia to give much thought to what it might feel like actually being on the ground in a space that many of us mythologized.

Before our visit, MGA felt less like a real place and more like a fantasy uploaded to Instagram. For it was there, on the world's preeminent image-sharing platform, that the concept of a microgrid in the middle of the 'hood first felt palpable to me—even if I could only "visually 'touch'" a pixelated version of it from afar.³ I had noted, in particular, the images in figure I.1, which sit side by side with no blank space separating them in a post on a real estate company's Instagram page. 4 With text accompanying these and other images, the post celebrated MGA's then-recent renovations—including the microgrid installation. The post caught my attention because it juxtaposes solar with a Black woman presenting an image of poor Black children smiling in school uniforms. It thus situates solar in a raced and classed context that challenges the conventional wisdom regarding renewable energy. More than simply accessible, solar here is a part of the community's broader rejuvenation; the respectable children and the woman's podium signal investments in Brownsville's future—a future powered by the solar panels to their left. The images suggest, then, that the kids of the ghetto can be at the forefront of a renewable energy revolution, that a neglected Black community can generate the energy it needs without investor-owned utilities, illustrating the elusive justice-oriented energy transition (hereafter just transition) that my comrades and I had long dreamed about.

But it was tough accessing this Instagram imaginary in a group of spectators led by a white man dressed for work. I kept to the back of the group, and before we entered the electrical room, a couple of middle-aged men politely stopped me to ask what we were doing. "We're here to see the microgrid!" I explained, only to be met with blank stares.

"What's that?"

I pointed to the rooftops. "Oh, you know, the solar panels."

"Hold up, we don't got solar panels here."

I couldn't believe what I heard. Had the management company really

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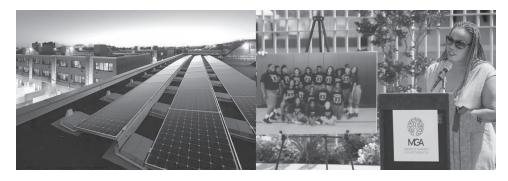


FIGURE I.1. Images from an Instagram post on the Marcus Garvey Apartments (MGA) in Brooklyn. GDSNY, "Marcus Garvey Village," Instagram, June 10, 2017, https://www.instagram.com/p/BVKwT1lhLpD.

withheld information about their sustainable infrastructure from their residents? In a revealing move, one of the company's office managers who had joined us looked suspiciously at the men and curtly explained that we were on a tour and that they weren't allowed to come to the electrical room with us, positioning the mere sight of the microgrid as a privilege denied to the very residents it was supposed to benefit. We descended to the underground space as the two men who had never seen it looked on at us, this group of strangers, with bewildered frustration.

I began to suspect that the Instagram post wasn't telling the whole story, that solar wasn't the raced and classed intervention I had seen on my phone. Perhaps, then, the post was a disingenuous simulacrum of inclusivity—propaganda that intentionally concealed the exclusionary reality on the ground.

But I would soon learn that social media's nefarious dimensions could not account for the disconnect between the ebullient Black faces in the post and the bewildered Black faces in real life. Instead, I argue in this book that New York City-based activists, experts, and laypersons alike often mistakenly conceptualize solar infrastructure as a force of equity, democracy, and social mobility because most of us have only ever known and interacted with such infrastructure through online platforms and screenwork. Indeed, differently positioned New Yorkers primarily relate to sustainable energy technologies through not hands-on labor or inperson interactions but instead a two-dimensional solar "visual economy" of which the Instagram post is just one part. 5 As I show in this

book, though, this visual economy cannot be reduced to the ethers of "the cloud"; it also emerges from solar technology's *material properties*— its spatiality, modularity, and shimmering surfaces, for instance. I contend that these material properties work in tandem with cloud-based platforms and screenwork to produce a facile solar imaginary that figure I.1 only partly illustrates. Consider, for instance, *the diffuse spatiality* of solar energy—the fact that it can be generated in everyday spaces such as a destitute housing complex like MGA. This spatiality positions solar as an equalizing force in the images in figure I.1, as solar's decentralized topography centers marginalized subjects in many online renderings of high-tech sustainability.

But when we peer beneath this screenwork's shiny facade, we can find a solarized world that is not as equitable as that Instagram post suggests: a solarized world produced through the structures of racial capitalism that uphold the fossil fuel status quo. I got only a glimpse of this insidious dynamic when I locked eyes with the two bewildered Black men who were denied a view of a microgrid that I—myself a Black man—was improbably given access to. As I would learn, this seemingly minor act of marginalization was but a miniscule snapshot of the opaque ways in which solar reproduces the structural hierarchies that the Instagram post suggests it upsets.

Subjects of the Sun contends that we can begin to realize the radical potential of solar simulated in figure I.1 when we understand how such visuals obfuscate the raced and classed structures that simultaneously produce solar and hide it from MGA residents (in ways our tour would further reveal, as discussed later in this introduction). I wager that this sober recognition can address the contradictions of an ostensibly equalizing green energy infrastructure contingent on the toxic ravages of racial capitalism. This project first requires an understanding of how contemporary subjects often relate to not just solar but energy more broadly through visual media—a topic I now explore before returning to Brownsville.

ELECTRICAL SPECTACLE

The fossil fuel industry doesn't want you to see how they produce energy. Their propaganda prominently highlights modern essentials like planes, medical technologies, and heated homes but not the toxic infrastructure that enables those essentials: oil rigs, pipelines, power plants. In contrast, the solar industry saturates their media with images of sun-drenched



solar panels, calling on you, the energy consumer, to actively envision how your energy *could* be produced. This is partly why the veiling of MGA's microgrid was so jarring; solar is usually highlighted for *all* to see—even if this revelation often happens on a screen.

Consider the two images in figures I.2 and I.3—both focused on New York City. The first of these images appears in a promotional video for the American Petroleum Institute (API) while an authoritative narrator states, "There's energy everywhere. But sometimes it can be hard to see." The image attempts to address this visual conundrum by branding NYC's buildings and bustle as "energy," bringing some visible form to the ubiquitous force of life that often eludes our sight. After presenting the city skyline, API visualizes energy through images of grassy mountains, gas stoves, oceans, suburbs, space travel, home appliances, and cell phones—seemingly anything other than the extractive infrastructures through which the fossil industry produces energy. In contrast, the second image—a post from a Brooklyn-based solar company's Instagram page—frames the city's built environment by drawing direct attention to a solar array. In this context, energy is rendered visible through the spectacle of infrastructure.

Thus, as solar transforms the political economy of energy production, it also shifts the *visual* economy of energy consumption, generating an optics of electricity infrastructure that counters the relative invisibility of fossil fuels. Indeed, the dirty refineries and extractive zones that



FIGURE 1.2. Energy and New York City's built environment. Still from American Petroleum Institute, "Intro—2022 State of American Energy."



FIGURE I.3. Energy and New York City's built environment. Brooklyn Solar-Works, #solarpower in the Big **6**, Instagram, November 18, 2022, https://www.instagram.com/p/ClHkdaqOCHz.

many of us depend on for survival are often hidden from our everyday view, such that images of solar invite us to envision a sustainable version of that which we usually can't even see. More generally, visuals of "clean energy" infrastructure iconize that *invisible* force that powers modern society—electricity—giving a visible form to streams of charged electrons that the human eye can't detect.

Crucially, this aesthetic is a medium for reimagining the raced, classed, and gendered order of racial capitalism, enabling the sort of utopic dreaming through which I romanticized Brownsville's microgrid. Put differently, solar imagery often visualizes infrastructures of electrical power as a means of redressing entrenched structures of intersectional power.

Consider the two images in figures I.4 and I.5, both taken from the Ins-

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FIGURE I.4. Blue-collar solar labor on a Black worker co-op's Instagram page. Solar Uptown Now Services, "Support Black Co-Ops," Instagram, accessed November 25, 2022, https://www.instagram.com/solar.uptown.now.services.

tagram page of a Black, worker-owned solar installation cooperative in NYC. ⁹ By visually linking solar with Black worker co-ops, the first image suggests that renewable energy can empower the Black proletariat to own the means of production. In this way, it offers a measured contrast to the world of fossil energy, which is dominated by white executives and power brokers. ¹⁰ The second image employs a geometric aesthetic reminiscent of constructivist Soviet propaganda to visualize rooftop solar as a catalyst for not only forging "stronger communities" but also empowering blue-collar women workers. Given that the co-op who posted this image does not have any women worker-owners, the image simulates an imagined horizon of gender-inclusive diversity—a spectacle of worker



FIGURE I.5. Blue-collar solar labor. IWW Environmental Unionism Caucus, "Green Jobs and Intergenerational Justice: Trump's Climate Order Undermines Both," March 30, 2017, https://ecology.iww.org/node/2169.

solidarity with women, who comprise a sliver of the blue-collar work-force. When viewed together, both images render solar as a medium for redressing the economic inequality, anti-Blackness, and patriarchy of racial capitalism, suggesting that renewable energy can transform both our infrastructures of electrical power *and* entrenched structures of intersectional power.

But as my MGA tour suggested, looks can be deceiving. These images obfuscate what my interlocutors' bewildered Black faces hinted at: oppressive systems can inhere in even the greenest technologies.

IN AESTHETICIZING a Black worker cooperative, community power, feminist labor politics, and a microgrid in the 'hood, the Instagram images I've discussed gesture to a sentiment that many of their viewers more explicitly endorse: solar energy must be central in the struggle against racial capitalism. ¹² On the surface, this sentiment makes sense. After all, solar can free poor communities of color from the chokehold of petro industries, empowering these communities to own the energy they depend on. ¹³ It can challenge the extractive paradigm at the heart of both fossil capital and its antecedent, the transatlantic slave trade, centering energy generation on sustaining life, not bottom lines. ¹⁴ And it can enable many of us to engage with energy infrastructures that often sit



quietly in the backdrop of our consciousness, addressing our alienation from the slow violence of electricity production.

But when we look beneath the shiny facade of solar imagery, this "clean power" instead appears enmeshed in the machinations of racial capitalism. Solar technology is made from toxic materials mined from the earth; manufactured with the physical labor of precarious people of color; transported transnationally with fossil-fueled ships; installed by exploited, low-wage workers; and could potentially become a significant e-waste problem in marginalized communities throughout the world. From child cobalt miners in the Democratic Republic of the Congo to poisoned manufacturing communities in China to imprisoned Black and brown workers in the United States, the terrain of solar production is molded in those long-standing "sacrifice zones" that constitute racial capitalism. 16 More generally, solar and other renewable energy technologies can be deployed to increase the efficiency of the existing capitalist structure, generating new markets and optimizing existing ones. And as I began to suspect during the MGA tour, even when corporations deploy solar in the 'hood, it is not always evident that it will empower local residents—a hunch that my research would only corroborate.

Subjects of the Sun addresses this tension between, on the one hand, a transformative vision for solar rooted in racial and economic justice—what the Instagram images aestheticize, what I had hoped to encounter in Brownsville—and, on the other, an emergent structure of "sustainable" capital accumulation that is no less extractive than its fossil forebears. Specifically, this book explores how work for a "just transition" often unintentionally reproduces the intersectional hierarchies and modes of exploitation it is supposed to supplant. I center my analysis on the image-oriented, graphic, and screen-based work of sustainable energy technocrats at for-profit solar corporations and of climate justice activists at EJ organizations like EQUAL in my hometown, NYC. I conducted ethnographic research there from 2015 to 2018 as a grad student after working for almost a decade on sustainable energy policy as a young professional with EJ activists and labor unions throughout the city.

I contend that the images, graphics, and screen-based platforms that New Yorkers use to envision the just transition overlook the symbiotic relationship between racial capitalism and modern energy in even its greenest forms. In exploring this elision, my analysis focuses less on my interlocutors' moral shortcomings and more on an agent without a clear



political consciousness: solar technology itself. I consider how this technology takes form in a dense urban landscape to suggest that solar is not simply a material infrastructure to generate electrical power from the sun. It is also an affective infrastructure whose physical form can shape our senses and sensibilities, orienting social imaginaries toward uncharted political horizons—as evinced by my Brownsville romanticism. In this vein, solar technology has reconfigured aspirations for racial and economic justice in communities grappling with intersecting climate, housing, and employment precarities, as the Instagram images partly demonstrate. I argue, though, that this affective power paradoxically solidifies the hegemony of racial capitalism, as it inspires aspirations for a solarized political economy that appears outside of that which constitutes it—an ecosocialist vision of Black and brown communities fighting climate change through technologies that are embedded in the very economic order that that vision disavows.

In dissecting this vision, my analysis highlights the centrality of sight and spectacle to dominant forms of contemporary energy governance, exploring images that are coterminous with those on the previous pages. As electricity is at once imperceptible to everyday sight and foundational to a modern world centered on screens and surveillance, it necessitates forms of visual representation that render it visible and thereby governable.¹⁷ This ocularcentric imperative has particularly insidious effects when it comes to solar. Specifically, I argue that what I call late liberal screenwork interacts with solar's material properties in ways that conceal the extractive logics of racial capitalism—perpetuating those very logics in the process. Put differently, visualizations of solar often suggest that it can move us beyond the ontological divisions through which racial capitalism operates. As Cedric Robinson has shown, capitalism is rooted in a racialized framework of "differential value" in which capital accumulates through social structures of racial difference.¹⁸ I want to suggest that solar's physical forms (its shine, its rooftop placement, its customizability) work in conjunction with certain visual forms (Power-Points, smart boards, social media) with the effect of obfuscating this differential value.

I uncover this obfuscatory work by exploring several material properties of solar infrastructure, namely, its decentralized terrain, its shiny appearance, its modularity, its electrical quantifiability, and the corporeality of its requisite labor. I argue that these material properties work closely with images, digital platforms, and quantitative graphics to shape

the progressive vision animating my preconception of Brownsville—a vision in which renewable energy can eradicate the constitutive tensions of racial capitalism (white versus other, society versus nature, corporations versus workers). But solar is no less likely to extract value from these dualistic differences than other, dirtier forms of industrialized energy. It relies on extractive zones, exploitative markets, elite expertise, and an anthropocentric order, even when it appears to flatten these structures. ¹⁹ My point, then, is not that solar power is the same as petro power but rather that it is no less enmeshed in differential value—a point this book expands on at length. As a corrective to an energy politics that obfuscates differential value through images and graphics, *Subjects of the Sun* calls for a just transition that centers the senses and sensibilities neglected by screenwork: one's haptic care for their local environment; the full-bodied feel of infrastructural labor; the sublime affect of the nonhuman world.

Before exploring this sensorial horizon, though, I now further contextualize the relationship between racial capitalism and energy infrastructure. As I show, screenwork deceptively suggests that solar can overcome this entrenched relationship.

ENERGY'S EXTRACTIVE RELATIONS

A range of scholarship contends that solar has the power to either sustainably maintain the capitalist status quo in the face of climate crisis or disrupt the dominant political economy, as if we have a choice between extending fossil capital's inequitable growth paradigm or democratizing the productive output of that paradigm.²⁰ I want to suggest that these sorts of analyses narrowly understand solar as a technological force that can impact carbon emissions, energy prices, job creation, and liberal governance, as opposed to a relational force that shapes how people engage with each other and the more-than-human world of which we are a part. Subjects of the Sun instead adopts the latter perspective to illuminate how solar at once upends and upholds the relations of differential value that constitute racial capitalism, destabilizing clean energy teleologies.

This analysis requires that I first clarify what I mean by "relations of differential value" and how these relations are inextricable from energy infrastructure. The English word *relations* is at once a conceptual tool for linking disparate phenomena, a way of characterizing interdependencies and contingencies among a range of persons and agents, the name for the fundamental "building blocks of society," and a synonym for positive

interpersonal connections and kinship ties.²¹ Difference is immanent in all relations, as the word can characterize either the similarities, shared attributes, or structural binds of distinct entities, on the one hand, or the points of convergence among (ostensibly) dissimilar things, on the other.²² At its core, racial capitalism is a structure that configures relations and thereby organizes difference in ways that orient ontological hierarchies, social formations, and interpersonal connections around the pursuit of surplus value. For example, racial capitalism organizes humans' relations with nonhumans around extraction, calcifying the perceived difference between the two into an inflexible, exploitative hierarchy.²³ It also generates new axes of relational difference, reconceptualizing group identities and social formations through racial and ethnic schemas that enable some humans to exploit the labor power of others.²⁴ Differential value names the profits and privileges that these exploitative configurations of difference yield.²⁵

Energy infrastructure has long been a central medium for materializing difference and producing differential value under racial capitalism.²⁶ Broadly speaking, infrastructure is a means of giving material form to social relations, enabling the linkages, formations, and connections that constitute society.²⁷ Racial capitalism ushered in industrial-scale infrastructures: material forms that facilitate relations among labor, environments, "natural resources," and capital to generate surplus value through economies of scale. If we understand energy to be not electricity, heat, or fuels but instead a capacity immanent in those things—that is, the ability to transform matter—then the first industrial-scale energy infrastructure was not the transcontinental railroad, the electricity grid, or the interstate highway but instead an earlier approach to scaling up this transformational capacity: the transatlantic slave trade. ²⁸ Modern energy, then, emerged from a plantation system powered by Indigenous genocide and Black life—a capacity to transform matter in ways that reorganized human relations around (anti-Black) differential value. These relational dynamics persisted even as fossil fuel combustion replaced slavery as the dominant energy infrastructure. From coal mines to railroads to refineries, the fossil-fueled industrial order continued to designate Black and brown lives and land as extractable and disposable, maintaining the plantation economy's hierarchies through labor exploitation, environmental injustices, and, by extension, the everyday relations through which Black and brown people experience quotidian indignities.²⁹

A just transition to renewables must therefore transform the rela-

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tions that constitute energy infrastructure, generating new ways for people to connect to one another and to the more-than-human world, unbeholden to the paradigm of differential value. This book contends that the images, graphics, and digital platforms through which many New Yorkers relate to solar infrastructure misleadingly simulate such a transgression, configuring political imaginaries that often don't meaningfully reconfigure racial capitalist relations. As I show, the mystifying potency of these media is a testament to the ways they interact with the infrastructural hardware and physical configurations of electricity technologies. That said, these material-discursive entanglements are not particularly novel. For starters, energy infrastructure transmits information and is thus a form of media in its own right. Furthermore, numerous scholars have explored how the transmission of information dialectically co-constitutes infrastructural hardware.³⁰ But in zeroing in on the renewable energy transition, Subjects of the Sun shows how this dialectical configuration alienates differently positioned subjects from the infrastructures they hope to steward by paradoxically choreographing a world in which they overcome that alienation.

I therefore argue that a just transition must enable us to foster relations with energy that are not centered on the screenwork through which we visualize energy. Toward this end, the book's final chapter considers the many emotional, sensorial, and bodily ways we relate to energy that are not preoccupied with digital media, pointing to affective resonances that can frustrate the extractive, hierarchical relations that produce differential value. From stewarding the earth with solar-powered tools to on-the-ground organizing for solar cooperatives to cultivating a consciousness of the sun, humans can work with solar energy without relying solely on cloud-based platforms, countering the hierarchical logics of racial capitalism in the process.

To underscore the imperative of this sensorial reorientation, I now return to the screen-based simulations of the Brownsville microgrid—visual artifacts that illuminate the broader spectacle of solar that this book explores in depth.

THE BROWNSVILLE MICROGRID

As a Black New Yorker from a community marked by environmental injustice, I was somewhat taken aback when I saw the Brownsville microgrid on Instagram. For in aestheticizing the upward mobility of a mar-



ginalized Black community vis-à-vis solar commodities, the Instagram images in figure I.1 affiliate Blackness—the paradigmatic form of racial difference—with the hegemonic project of high-tech sustainability, suggesting that eco-infrastructure can redress the structural schisms of racial capitalism.³¹

I want to suggest, therefore, that the MGA post offers a helpful starting point for understanding how screenwork and cloud-based platforms work in service of what Elizabeth Povinelli calls *late liberalism*. Povinelli conceptualizes late liberalism as the market-oriented governance of racial difference pioneered by states to counter—and often co-opt—the decolonial, antiracist, and feminist movements that challenged their legitimacy, while also managing the social and economic fallout from the retreat from Keynesianism.³² Povinelli argues that late liberalism simulates an image of multicultural unity and reform—an *appearance* of cultural recognition staged by the state—to detract from more radical forms of structural redress.³³ But the visual imprint of late liberalism is not limited to this sort of highly choreographed image from above; as I show in this book, the market-based governance of racial difference also occurs through everyday screenwork like the Brownsville Instagram post.³⁴

Specifically, this book documents *late liberal screenwork*: cloud-based platforms and digital content that render commerce and commodities as antidotes to raced and classed inequality—often unwittingly undermining social movement work. This concept highlights how my interlocutors' mundane ways of relating to the world vis-à-vis screens (e.g., scrolling on their phones) double as a mode of experiencing remarkable structural transformations (e.g., the installation of a climate-resilient microgrid in a poor Black community), paradoxically endowing the everyday texture of life under racial capitalism with the feeling of moving beyond differential value. Of course, when I first saw the images in figure I.1, I wasn't explicitly thinking in these terms because the post that broadcast them had no didactic antiracist message whatsoever. Yet given the metonymic relationship of Blackness and otherness, this and other similar visual renderings of Black people invariably evoke race despite their dearth of commentary on racial difference. 35 To do so through a celebratory image of solar infrastructure is to comment on the inclusive potential of the clean energy economy, irrespective of what the image curators intended to convey. Next, I ethnographically situate these images to elucidate the misleading sense of possibility that they produce, revealing the ways my

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interlocutors and I myopically relate to energy infrastructure through the abstractions of cloud-based platforms.

THE VIEW FROM NOWHERE

Months before I saw the images in figure I.1, Mark, a white engineer and PhD candidate from California, typed something into his phone and showed me the screen (figure I.6).

There, before my eyes, was evidence of something that otherwise struck me as impossible: a solar microgrid in Brownsville! I had met Mark only minutes before—we were at an academic conference in Barcelona and on learning what I researched, he began gushing about the (thenuncompleted) microgrid, baffled that I didn't know about it. "It's gonna have a lithium battery—the first in New York! You sure you've never heard of this?" I was rather certain, though, that he was mistaken—until he showed me his phone. In a "hyperlinked society," cell phone browsers are disruptive in this way, uprooting habituated skepticism in the course of factual disputes.³⁶ This sort of screen-based intervention has an almost scripted rhythm. First, one summons the facts via Google, then one quickly flashes the facts to nonbelievers, and then these nonbelievers instantly capitulate, ceding authority after only a cursory beat of visual verification. While stubborn skeptics will insist on reading the facts closely, others—like me—will humbly defer to an evocation of Google, knowing that the certainty they harbored only a moment prior is likely unjustified. In the social field of everyday conversation, the browser car-

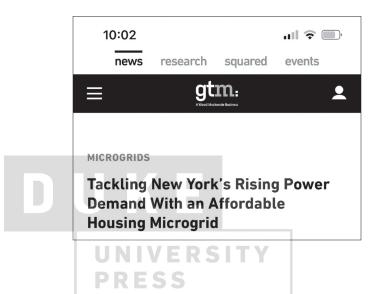


FIGURE I.6. A screenshot of the headline of
the microgrid article
that Mark showed me.
Julian Spector, "Tackling
New York's Rising Power
Demand with an Affordable Housing Microgrid,"
Greentech Media, December
16, 2016, https://www
.greentechmedia.com
/articles/read/new-york
-grid-microgrid-bqdm
-con-ed-peak.

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ries an epistemological weight that instantly unsettled my assumptions, sketching a horizon of possibility in which infrastructural transformation led by a marginalized community—not the state—presages otherwise unlikely social change. Thus, the tinted text on Mark's phone evoked a late liberal world where racial progress emerges not through political struggle but through commodified technologies, countering my calcified impression of Brownsville as structurally oppressed. Indeed, everyday screenwork advances late liberalism when it stimulates imaginaries at odds with a radical political consciousness—whether it is intended to or not.

Of course, I wasn't so naive to think that the microgrid had enabled Brownsville to overcome its subaltern positioning. Furthermore, my broader skepticism about this microgrid remained. I wondered, suspiciously, why a white scholar with no connection to NYC knew more than I about the infrastructure of a Black community in the city where I was born, raised, and conducting research. Why was a privileged outsider so knowledgeable about a project in the middle of a 'hood that he had no relationship with?

Putting this question aside, I was excited to hear that Brownsville was improbably developing a solar microgrid, for several reasons. First, solar technology—whether connected to a microgrid or not—reduces dependence on fossil fuels and electricity bills. This is particularly impactful in low-income communities of color where residents spend a higher percentage of their income on electricity and are disproportionately vulnerable to fossil-fueled climate change.³⁷ Microgrids that are powered by solar technology amplify these positive impacts. As Mark pointed out, solar microgrids are connected to energy storage batteries so their users can access low-carbon electricity when their solar technology can't draw directly from the sun (notably after sunset or on cloudy days). In this vein, every microgrid—whether powered by solar or anything else dramatically reduces its users' dependence on the central grid by enabling them to draw a significant share of their electricity from local energy generation. This localization coupled with battery storage ensures that solar microgrid users can consistently access electricity even when a blackout occurs or when the grid is unreliable. For this reason, solar microgrids symbolize resilience—celebrated for not just mitigating emissions but also empowering communities that are vulnerable to infrastructural disruption due to climate change. Additionally, the installation of solar microgrids demands good-paying blue-collar labor, and it can there-

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fore generate quality job opportunities for communities struggling with underemployment.

But there is another, often overlooked potentiality of microgrids in communities like Brownsville: they can empower people who have traditionally been excluded from the spaces where electricity is controlled to take a leading role in the power sector that their lives depend on. Microgrids could therefore transform marginalized people from passive consumers to active agents in the political economy of energy generation, emboldening them to foreground their racial and economic concerns in broader energy transition efforts. This political potentiality is rooted in how microgrids reconfigure material power. When a community is given the power to generate part of its own electricity, the power to sell excess electricity that it generates to the central grid, the power to exercise some economic autonomy from unaccountable investor-owned utilities, and the power to survive with minimal disruption in the face of climatic volatility, it can leverage this power to reimagine itself as a self-sufficient collective. By decentralizing electricity generation, microgrids can engender a sense of possibility—a *feeling* that everyday people can upend the corporate system that controls industrialized modernity. When decentralized electricity affords us new power, this power could transform our politics; infrastructural transition could instigate structural change.

Could. But not necessarily. Microgrids' decentralized power could just as easily maintain the status quo of electricity governance—a world in which marginalized people have little knowledge of energy generation. Electricity's differential value stays intact when privileged experts like Mark have insider information on power production while everyone else is left in the dark. So on my flight back home, I considered the oddity of learning about Brownsville's microgrid from a white man in Europe, wondering if my late liberal response to his browser was warranted.

MY CURIOSITY and uncertainty about Brownsville's microgrid only grew when I took part in an ostensibly run-of-the-mill conference call several months after I returned to NYC. The call was with a solar technical assistance company and EQUAL—the aforementioned EJ organization. I was volunteering for EQUAL's campaign to bring solar to a working-class community of color that resembled Brownsville. A senior representative from the technical assistance company mentioned the Brownsville microgrid during our discussion, lauding its transformative capabilities. Once again, I was struck by the novelty of hearing a technology expert—a

privileged white man with no relationship to Brownsville—gush over the technological innovations of a community with a reputation that couldn't be further from that of Silicon Valley. As he spoke about the microgrid's unprecedented lithium battery, I wondered if he was, on any level, thinking about Black people or poverty or police brutality or negligent landlords or any of the other fraught things often affiliated with Brownsville—or if, alternatively, he viewed the community as the home of an innovative infrastructure and nothing more. I didn't realize then how solar works with late liberal screenwork to animate white-collar care for destitute spaces—a central theme of *Subjects of the Sun*.

Regardless, I was glad he mentioned the microgrid to EQUAL's activists, as it inspired a curiosity that had gone missing from their work. How, they wondered, had folks in Brownsville managed to bring such an expensive beacon of high-tech sustainability to the 'hood? For the previous three years, many of EQUAL's community organizing efforts had focused on this very goal, but a local microgrid never felt like it was more than a pipe dream. While EQUAL had long talked the talk of an "inclusive green economy" that fosters worker ownership and sovereignty from investorowned utilities, my comrades had grown hopelessly aware of the practical limitations of this vision when it came to developing a local microgrid—a prohibitively expensive and structurally challenging aspiration.

This hopelessness, though, was rooted not only in the particular difficulties of microgrid development but also in the broader everyday routines of EJ organizing in marginalized spaces: holding your breath while slipping flyers into mailboxes in piss-scented lobbies; traversing the gray blur of treeless boulevards in EQUAL's bright yellow T-shirt trying to find someone—anyone—who cares enough about truck pollution to talk to; standing in the run-down community center with puke-colored walls while you offer the same welcome spiel to an unchanging group of opinionated local retirees every other week, seemingly in perpetuity; feeling despondent when you see Leroy, the local Ballantine-sipping panhandler, kneeling on his milk crate before the newly gentrified bodega that's stocked with oat milk and white yuppies who avert their eyes when he asks for a dollar; sitting at an infantilizing cubby of a desk trying to find a moment of quiet in the stale indoor air and harsh overhead lights of EQUAL's office before it's inundated with the chatty participants of a community meeting. In these and countless other habituated bearings, EQUAL's staff moved through their community with a sense of stasis; familiar streets, buildings, elevators, scaffolding, vestibules, pulpits, hallways, and meeting rooms were heavy with the mind-numbingness of organizing work that often yielded little in the way of structural change. "New day, same shit," mused Dante, an EQUAL organizer, as we marched through familiar streets distributing flyers on solar, speaking with a complacent levelheadedness that felt essential to working there. When you're ostensibly stuck in these spaces for years on end, trying, futilely, to unearth the violent social order that made them what they are, they become marked with the unmovable stench of raced and classed power, this dispiriting sense that this is just what it's like to be here. So the microgrid idea—as much as we loved it—often felt incompatible with our everyday experiences in such a Black and brown community. While EQUAL staff never hesitated to excitedly share a generic vision for a local solar microgrid—proclaiming, without specificity, We can develop one in our own backyard!—this vision's dearth of detail betrayed the seldomspoken sentiment that *stuff like that don't happen here*—an indifference that hung in their heavy breaths between the words they spoke on streets that they had long grown tired of.

Subjects of the Sun explores this disjuncture between the quotidian disappointment of EJ activism, on the one hand, and a bold vision for an inclusive clean energy economy, on the other. I attribute this disjuncture to the uneven affective texture of racial capitalism, moving beyond ideological polemics to illuminate an ambivalent environmentalism focused on the contradictory task of forging an inclusive solar-powered utopia in the dystopic shadows of free market hegemony—the complacent mien that my comrades wore while canvassing their dilapidated terrain. Yet this ambivalence seemed to evaporate when they learned that a community comparable to theirs had improbably realized the pipe dream of a local microgrid. Brownsville became a much-needed jolt to our sense of possibility, manifesting in our persistent cry after the call: But how did they do it?! Put simply, MGA's microgrid, like any late liberal icon, appeared to defy the differentiating logics of racial capitalism. Subjects of the Sun attempts to account for this defiance, theorizing how the spectacle of solar animates imaginaries of moving beyond differential value aspirations that would call on us to witness the microgrid with our own eyes.

AFTER OUR conference call, Selena, one of EQUAL's leaders, googled the Brownsville microgrid and pulled up the aforementioned Instagram post. There she saw not only the photos in figure I.1 but also two photos of the

sidewalk in front of MGA on a gray winter day. The post positioned these unremarkable landscape visuals right below the pictures of solar panels and Black children with no white space separating them, enfolding a high-tech "climate solution" into the mundaneness of the children's built environment. It was precisely this mundaneness that caught Selena's attention—the fact that a remarkable technology appeared as an unremarkable part of the community. "It would be so cool if we could do that here," she said. "You're just going about your day like normal, except it's powered by a resilient solar microgrid." Your day like normal. These words marked an interest in the innocuous, lacking the visionary zeal that initially animated EQUAL's curiosity regarding Brownsville.

Crucially, this innocuousness was well aligned with EQUAL's visual aesthetic. The organization's small office was adorned with selfies of local residents in yellow EQUAL T-shirts posing throughout their community this banal mosaic of half-smiling Black and brown people gesturing to nothing in particular except the EQUAL logo on their chests, seemingly just living their normal lives as community activists. The leadership of EQUAL constantly instructed everyone involved in their work to take these nondescript selfies when doing even the most quotidian activity related to the organization, like sitting at a community fair's information booth or attending a community meeting on workforce opportunities. The organization's visual aesthetic was therefore resonant with the microgrid Instagram post, centered as they both were on normal Black people uniformed in T-shirts happily posing in their everyday spaces while gesturing obliquely to inclusive environmental improvement. So as Selena scanned the Instagram post with a soft contentment—as if its quaint *look* of inclusive energy management had touched her in a bromidic way—I considered how this visual aesthetic had redirected her personal energy from the more radical EJ politics she had initially brought to the organization and toward the more generic appearance of marginalized communities improving their situation through eco-friendly technologies. How, in other words, had the visuals that she frequently peppered her PowerPoints with—images all over EQUAL's office—transformed her political commitments such that they now included the curation and consumption of photos?

I never doubted the sincerity of these commitments; sharp witted and no-nonsense, Selena worked tirelessly for transformative EJ legislation. Yet when she'd follow her colleagues' instructions and assiduously choreograph a group selfie at a protest or put together a PowerPoint that

was light on policy details and saturated with such selfies, she seemed slightly possessed by late liberal screenwork, as though the simulation of empowered people of color was a goal in and of itself. The curation and consumption of these visuals injected a lightness into social justice struggles, offering Selena putatively apolitical moments amid explicitly political work: a second to breathe when taking a selfie, an excuse to ignore her quiet doubts, an easy task without legislative complexity, a reason to smile. EQUAL's selfie culture made the political bearable. It complemented the quiet indifference that Selena and her colleagues wore beneath their protest chants and public testimony, habituating them to a mode of activism that at times lacked fervor and fastidiousness.

The Brownsville Instagram post, then, offered a familiar apolitical lens for apprehending the microgrid, inviting a feeling of levity that stood side by side with Selena's more substantive curiosity regarding the microgrid's origins. I can't speculate as to whether the post altered her orientation to the microgrid in any way, but it certainly provoked in her the sort of light reaction characteristic of mindless scrolling, rendering Brownsville as something more banal than a beacon of possibility for life beyond racial capitalism: a "cool" version of normalcy. Subjects of the Sun interrogates this juxtaposition of normalcy and possibility—mundane visuals and transformative visions—exploring how everyday images, graphics, and digital platforms animate an energy transition that feels as habituated as any facet of our screen-based lives even as it gestures to a world beyond anything we're accustomed to. As Selena closed her browser and announced her intention to learn more, I hoped that both of these affects—normalcy and possibility—would coexist in EQUAL's forthcoming efforts to mimic Brownsville's success. Selena wouldn't just view MGA's residents as a visual icon of insipid inclusivity . . . right?

THE NEXT day, Selena announced her intention to schedule a tour for EQUAL to see the microgrid in-person. In the moment, this made sense to me. How better to learn about an unfamiliar space than visiting it and forming ties with the people who steward it? But, in retrospect, this sensible idea strikes me as slightly off. For in-person solidarity is not interchangeable with a sightseeing tour. If Selena had proposed to meet MGA residents to better understand how on earth they developed a microgrid, this would be aligned with the people-oriented spirit of grassroots activism that EQUAL championed. But, like Mark, she didn't mention the people. She instead focused our attention on touring the microgrid. And

while the sightseeing tour is a common approach to learning about unfamiliar things in the contemporary world, it is also productive of the colonial forms of difference on which racial capitalism feasts.

Indeed, the sightseeing tour, whether pursued for imperial, empiricist, or leisurely reasons, emerged as a Euro-American colonial practice for viewing and observing the Other—usually at a safe distance from the exotic object of inquiry—positioning one's sight as a primary medium for learning about difference.³⁸ This ocularcentric approach to apprehension generated a one-sided form of encounter, rendering cultural difference in terms of powerful viewers and objects to be viewed. In this vein, the sightseeing tour was an integral tool in the mastery of nature, enabling colonial powers to visualize and thereby control the manifold forms of life deemed less than human, including nonwhite peoples.³⁹ As such, the sightseeing tour was central to the global mapping of differential value, creating the raced extractive zones constitutive of racial capitalism. While today's sightseeing tour has seemingly more benign objectives than its imperialist forebearer, its colonial history cannot be extricated from current practice, as our Brownsville tour would soon demonstrate.

At EQUAL, these colonial dynamics first reared their head when Selena suggested that the real estate management company who owns MGA could serve as our tour guide. This seemed reasonable, as said company managed the several dozen residential buildings where the microgrid was installed, and they therefore were the only party that could give us inperson access to it. But Selena was essentially proposing that a for-profit corporation run by white men would tour us around a poor Black community. None of us gave any thought as to what it would mean for us to view this community through a corporation's gaze. In Selena's proposal, then, this community would be an object of inquiry to observe at a distance from the perspective of corporate ownership, not a shared space in the struggle for environmental justice. Perhaps this tradeoff would be justifiable if seeing the microgrid would reveal something that could help EQUAL replicate MGA's success. But at no point did we consider how a sightseeing tour could aid EQUAL's efforts. We took for granted that the structure of knowledge acquisition at the core of the colonial paradigm of sightseeing was essential to gaining the information we sought. This sort of reasonable hubris is a central theme of Subjects of the Sun, as I explore the ways in which energy professionals employ a "view from nowhere" in destitute spaces that are imagined as a ground zero of the just transition.40

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While the company agreed to host us for a tour, scheduling it proved difficult for logistical reasons. Furthermore, none of EQUAL's activists knew the technical ins and outs of installing electrical infrastructure, so there was, in theory, no need to physically go to Brownsville to witness the microgrid with their own eyes. But the activists did know a tremendous amount about solar financing programs—an important body of knowledge, as we will see—so a quick phone call with the company to discuss these programs should have been sufficient. Seeing the microgrid would not enable us to secure the necessary financing and technical expertise to develop another microgrid in EQUAL's community, nor would it quench our curiosity about how the microgrid came to be.

Yet when we discussed the possibility of simply scheduling a call with the company, we quickly dismissed this reasonable idea for reasons we never articulated. We instead affirmed that we were "excited" to see MGA. Perhaps we were less interested in learning how the improbable microgrid came to be and more intrigued by a banal image of it: the novel normalcy aestheticized by Instagram—this remarkable infrastructure integrated into the unremarkable texture of everyday life. Or perhaps, instead, we were intrigued by a *vision* of it: a present-day future in which the microgrid generated not only electricity but also political sovereignty and a sense of resiliency, uplifting MGA's residents out of the ravages of racial capitalism. Was our planned tour simply a way of witnessing a shallow image of "cool" power, to quote Selena, or, instead, did it emerge from a more substantive imaginary of collective power? This book troubles the line here, suggesting that solar is a particularly affective technology because it blurs distinctions that separate late liberal optics from the lens of grassroots visionaries—the status quo from the spectacular—giving form to a muddled political ideology that I will introduce shortly. I only had an inchoate sense of this muddledness at the time, unable to fully grasp our intentions as we finally locked down a date with the company and hopped on the subway to Brownsville a few weeks later, entranced by the spectacle of solar on a sunny spring day.

A SPRAWLING campus of low-income homes named for the Black revolutionary Marcus Garvey, MGA is occupied almost entirely by low-income Black people. These homes are now powered in part by solar panels, a giant lithium solar battery, and a cutting-edge fuel cell, connected underground by a complex network of circuitry that could keep the community running on solar electricity if the grid malfunctioned. While the

firm that owns and manages the homes is a for-profit corporation run by white men, it has developed a reputation for doing the godly work of building quality affordable housing in a gentrifying megacity. Furthermore, Don, one of the company's white male senior property managers, went out of his way to schedule a tour with us, a group of EJ activists—a thoughtful gesture that I naively thought confirmed the company's Good Samaritan reputation. *Subjects of the Sun* explores many selfless corporate professionals like Don whose good intentions reproduce differential value vis-à-vis solar due largely to the technology's enmeshment in their screenwork, as I will show.

We sat with Don in the MGA community center, and he explained that the microgrid was primarily developed to address the city's broader infrastructural problems. The city's residential utility company, Con Edison, feared that the community's electricity demand could overwhelm the old electricity substation that powers Brownsville and spur a blackout. For this reason, they launched a "demand management" initiative that financed the microgrid. Thus, if Brownsville had had a decent substation, the utility would never have paid for the microgrid. Ever since my conversation with Mark, I had hoped that the microgrid was evidence of a marginalized community rising up from the periphery and beating the odds to secure their livelihood through innovative infrastructure, but, to my disappointment, it was just a cost-efficient, top-down operation instigated by a notorious investor-owned utility to safeguard their own lousy machinery.

At that point, there was, on the surface, no need for us to climb to the rooftops and look at the solar panels. The information we had come looking for—how to replicate this sustainable behemoth—would not be forthcoming no matter how long we stared at those panels or the lithium battery. Yet I certainly still wanted to see the internationally known solar microgrid with my own two eyes. I refused to dismiss the possibility that the community looked to it as a source of self-sufficiency, economic autonomy, and communal pride regardless of Con Ed's role in developing it—and I hoped we could sense this affective power if we inspected it in its local context. Even if MGA's residents had not fought for a microgrid, I still imagined an Afro-futurist juxtaposition between high-tech modernity and the wretched of the earth—the contiguity in the Instagram post. Regardless of whether my comrades also harbored this vision or not, we all were intent on seeing the microgrid even after we had acquired the information we had long sought.

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Don proceeded to lead us toward the campus's electrical room, exposing us to local residents going about their day-to-day lives: congregating on their homes' stoops, entering their apartments with groceries, checking the mail, talking on the phone on outdoor benches. He seemed unnervingly at ease moving through these people's intimate spaces. With an entitled gaze evocative of a safari, he positioned the microgrid as charismatic megafauna—as though it overshadowed the dark-skinned natives whose homelands we traversed—bringing the colonial dynamics of our sightseeing tour into focus. ⁴¹ It was then that I asked the two local men about the microgrid, only to be met with bewilderment. As the tour progressed, I continued to peel off from the crowd intermittently to ask residents if they knew about the solar microgrid. The answer was unanimous: No. Our tour, then, enacted a limited form of witnessing, a "view from nowhere" putatively detached from our positionality, as sightseeing—a vestige of colonial power—denies natives the lens through which it surveils their own spaces while positioning outsiders like us as unmarked.42

When we viewed the microgrid's subterranean electrical equipment and rooftop solar panels, the technology just sat there, making no sound, emitting no smell, revealing nothing we didn't already know. This only confirmed my sense that there was no need to see the microgrid. All the while, Don talked to us about wattage, grid-interconnection rates, and countless other numerical data—information that he and his colleagues withheld from the MGA residents, reinforcing the invisibility of their solar infrastructure. As we asked questions and took notes, he responded to us like we were worthy interlocutors, but the same couldn't be said of the people living in the buildings he managed.

Unlike the solar panels and the electrical equipment, the battery caught my comrades' attention—this high-tech homage to futurity on an impoverished Brooklyn backstreet—and they started taking selfies with it for EQUAL's social media. But they weren't the only ones intrigued. The battery shed's gate had been opened for our tour, so two local residents who were walking by the battery got their first unwitting glimpse of it, poking their heads in before scooting past the point where the locked gate usually was. The two residents, Roxanne and Felicia, appeared transfixed by this giant futuristic machine sitting in their backyard. "What the hell is that?" Roxanne exclaimed.

I retreated from the shed to talk to them. "You've never seen this before?"



"Nah, that gate's always locked," said Felicia. "I never even thought about what's behind it."

"Oh, it's really cool, it's a giant battery that stores the energy from the solar panels on your roofs." Par for the course, they, too, had never heard of MGA's solar panels. Instead of outright indulging their curiosity, they slowly crept closer to the shed with an uncertainty that suggested that they felt out of place. Within seconds their caution was validated.

"There's nothing to see here, you two," said the office manager. "This is a private tour for our guests, and believe me, you don't care about this, okay?" Roxanne and Felicia got one final glance of the mysterious battery and then obligingly walked back to the sidewalk. The office manager promptly closed the gate. "If you don't set boundaries, they'll do anything," she explained to me, expecting sympathy as she concealed the battery from the residents. But I was aghast. The battery's intriguing sight could have illuminated the power of the women's place of residence, empowering them, in turn, to participate in governing the electricity that they depended on every day. By prohibiting them from even seeing the battery, the office manager effectively stymied the microgrid's transformative political potential, fomenting differential value in the process. The people who have historically been unseen in the spaces where electricity is controlled—Black people, women, the poor—remained invisible, as a private corporation run by white men determined who saw what in the governance of electrons that remained largely imperceptible to the eyes.

OUR SIGHTSEEING tour presented a dispiriting contrast to the Instagram post, offering an up-close view of how poor women of color like Roxanne and Felicia are marginalized in spaces that late liberal screenwork brands as inclusive. This marginalization demonstrates how differential value is centered on not just systems of capital but also who and what can be seen. While the Instagram post visualized solar infrastructure in ways that projected inclusivity, our tour showed how said infrastructure remains unseen to those whom landlords deem invisible, positioning their residencies as not communal spaces but instead a source of value vis-à-vis renewable energy.

The tour, then, offered a lens into the ways in which invisibility links structures of intersectional power with infrastructures of electrical power—a central theme of this book. Women, people of color, and poor folks—people like Roxanne and Felicia—have historically seldom seen and rarely been visible in the shrouded halls of power where electricity

is controlled: the boardrooms and executive offices of the institutions that generate, transmit, distribute, and regulate the invisible streams of charged electrons that make modern existence possible, from federal energy agencies to rural cooperative utilities to private energy companies. 43 In this way, the structural invisibility of marginalized people coproduces the infrastructural invisibility of modern electricity. However, these invisibilities are not one and the same. The erasure of Black women like Roxanne and Felicia is of a different order than the relative obscurity of electrical infrastructure, to say nothing of the imperceptibility of electrical currents. What ties these invisibilities together, though, is the aforementioned form of visual apprehension at the heart of our sightseeing tour: the view from nowhere. This "view" refers to the removed perspective of experts whose distance from the spaces and people they observe allows them to occupy an unmarked position of power—an inscrutability in contradistinction to the discernible identities of those entities that sit beneath their gaze. Modern energy infrastructure is fundamental to this classed differentiation, as it produces and distributes the commodities that power racial capitalism—electricity, heat, and fuels—in spaces largely cordoned off from everyday life, demanding a technocratic class to manage those infrastructures at a distance. 44 Such distance, in turn, affords this technocratic class a panoptic view of society, a totalizing gaze of the humans who depend on those infrastructures to survive, converting laypeople into ratepayers that elites can view through demand management maps, energy consumption data, control rooms, and administrative nodes. 45 Our tour of MGA's microgrid suggested that this privileged perspective is not reserved for the dirty, industrial-scale infrastructure that has historically powered racial capitalism—that solar can similarly render everyday people as passive energy consumers prohibited from even seeing the spaces of power they depend on every day.

But while the MGA residents had been shut out from these spaces of power, there were in fact people with positionalities far closer to Roxanne than to Don who were afforded a view from nowhere: EQUAL's staff and me. Don's white-led management company went out of their way to accommodate us—a group of activists, many of whom were women of color, representing a low-income Black and Latino community—suggesting that the view from nowhere in the solar energy industry is not solely reserved for white elites. In *Subjects of the Sun*, I contend that this sort of inclusivity points to the ways in which late liberal screenwork is transforming energy governance with the rise of solar. Specifically, in

an information age in which energy governance largely operates through LCD screens, visual data are creating new opportunities for people from marginalized backgrounds with cloud-based proficiencies—such as Selena—to govern an electricity production apparatus that has traditionally been controlled by technocrats at a distance. But, as I show, these opportunities are not available to similarly positioned people who lack those proficiencies, such as MGA residents. Along these lines, this book argues that screenwork is integral to the management of intersectional difference in the United States' emergent clean energy economy, as smart boards, PowerPoints, and digital media related to solar electricity blur the ideological lines that have traditionally separated the predominantly white technocratic world of energy production from the predominantly nonwhite activist world of EJ. To illustrate this core problematic, I now return to EQUAL's work in the days after our tour, considering in greater depth why EQUAL's staff and I were given the privilege of viewing MGA's solar microgrid while Roxanne and Felicia were not.

AFFECTIVE POWER

When we returned to EQUAL's office the day after our tour, EQUAL's staff convened their weekly meeting to discuss their solar work. I assumed the meeting would allow us to strategize about how we might organize on the ground for a local microgrid in light of the dispiriting things we had learned on the tour. This seemed like a well-founded assumption, as community organizing was the foundation of EQUAL's work. The meeting room we convened in corroborated this sense, replete with the trappings of an archetypically grassroots space: a slightly scratched conference table that looked like it had been repurposed from an elementary school, mismatched chairs, a tiny patch of mold on the ceiling, windows that hadn't been cleaned in years. Posters chronicling EQUAL's past EJ campaigns adorned the walls, highlighting the community's fights against poor air quality, asthma, inequitable waste disposal, and environmental racism. As nonprofit professionals, EQUAL's staff were dressed in clothes that matched the room's somewhat unprofessional appearance: a rumpled button-down, basic jeans, their organization's bright T-shirt.

But if I were a little more attentive to the room's *feel*—its affective texture—perhaps I wouldn't have assumed that our discussion would focus on community organizing. For the collective attention of everyone in the room centered on a giant smart board at the front of it—a glow-

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ing LCD surface that dwarfed everything else in that space. A dashboard beamed from the screen, projecting metrics on the solar campaign's progress: the number of participating buildings, the number of kilowatts of solar installed, projected reductions in carbon emissions. Crucially, the dashboard stylized these metrics such that they didn't appear as dull digits. They instead took the form of colorful graphics and icons that, when combined with the screen's glow, caught the gaze of anyone who walked into the room—even those who didn't seem particularly vested in the campaign. Selena presented these updated metrics on the screen every week, grounding our solar discussions in both the quantitative data of EQUAL's campaign and the fluorescent surface that projected these data. So I shouldn't have been surprised when she opened our reflection on Brownsville by sharing the technical information we had gleaned from the tour, mentioning the number of solar kilowatts that the microgrid generated and Con Edison's incentive program, first and foremost. There was no mention of Roxanne and Felicia, no discussion of MGA's residents' involvement (or lack thereof) in matters related to the microgrid, no reflection on the untapped political potential of such innovative infrastructure. After sharing the data, Selena concluded briefly that MGA did not really offer a clear model for EQUAL to replicate, and she quickly moved to the next agenda item: the numbers glowing from the smart board.

The data on-screen instantly took center stage. The staff ruminated on these numbers, contrasting their progress to date with the enumerated goals they had set at the campaign's outset, lauding themselves for the close proximity of these two sets of metrics. They spoke of large local rooftops with the potential to generate the number of solar kilowatts necessary to achieve their overarching campaign goal, focusing on quantitative output. Much like our brief recap of our tour, there was no talk of promoting justice, countering corporate power, or dismantling the status quo. While an equity agenda initially inspired this campaign, it had devolved into a crusade for optimizing metrics, animated by the dashboard's glow, creating a spectacle of technical rigor. As their eyes flitted back and forth between one another's gazes and the screen before them, the dashboard felt like our collective ground, anchoring our focus.

In this way, the room was earily evocative of the predominantly white clean energy and property management corporations that I was also observing in the city's whiter, more affluent areas—corporations whose meetings were centered on dashboards with graphics on maximizing

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returns through solar. Many of those firms' employees embraced an ideology of growth and free markets that my EQUAL comrades renounced, but this ideological dissonance did not temper the similarity between the unspoken sensibilities that permeated both groups' spaces: the obsession with data, a performance of rigor, and a fixation on screenwork. Even as Selena and her colleagues mentioned "energy poverty" and "energy democracy," their screenwork endowed EQUAL's meeting with a technical sensibility unconcerned with social equity—this feeling of administrative proficiency and professional competency that is incongruent with grassroots organizing. In other words, the *affect* of the room, the smart board's fluorescent feel, emanated technocratic managerialism, not insurgent campaigning.

Affect is notoriously difficult to define. Comparable to but different from *emotions*, *affect* refers to the unspoken "intensities" that circulate between different forms of life—the inchoate sensibilities that permeate our relations with other bodies, spaces, things, and phenomena.⁴⁶ By inchoate, I do not mean "not fully formed," for affects can be thick and dense. Instead, I'm pointing to sensations that have not coalesced into a clear-cut form that we can effortlessly qualify in conventional language. As Lauren Berlant explains, affect "registers the conditions of life that move across persons and worlds, play out in lived time, and energize attachments," "saturat[ing] the corporeal, intimate, and political performances of adjustment that make a shared atmosphere something palpable." 47 As it points to intensities untethered to a particular entity or person—irreducible to a material form—affect is less a definitive descriptor and more an approximation of that which it signifies. Sianne Ngai aptly theorizes this indeterminacy: "Affects are less formed and structured than emotions, but not lacking form or structure altogether; less 'sociolinguistically fixed,' but by no means code-free or meaningless; less 'organized in response to our interpretations of situations,' but by no means entirely devoid of organization or diagnostic powers."48

To say, then, that EQUAL's meeting had a *technocratic affect* is to attempt to capture something elusive—to begin to qualify the room's feel as the activists engaged with metrics, performed technical competence, and reveled in the smart board's glow. In *Subjects of the Sun*, I argue that the affective resonances between a grassroots campaign for renewable energy in a low-income community of color and the predominantly white, cleantech corporations that I simultaneously explored point to the power of datafied renderings of solar to not simply affect how social spaces *feel*

but, more significantly, shape the intersectional politics of energy transitions. Specifically, I contend that the technocratic affect of EQUAL's smart board is symptomatic of a broader political project to mitigate climate change vis-à-vis the so-called free market—a project that, paradoxically, many of its purveyors consciously oppose. As I will show, the affective power of dashboards, PowerPoints, and cloud-based platforms inspires people who reject this project's neoliberal ideology to enthusiastically enact it in the name of environmental protection, infusing free market dogma into our everyday spaces, professional lives, and social movements. Consequently, anticapitalist women of color at an EJ organization, for instance, can unwittingly employ the market logics of efficiency and growth when they're fighting for local solar. Along these lines, screenwork affectively animates imaginaries of a late liberal world in which metrics help overcome structural inequalities, as visualizations of demographic data often occlude the complexity of racial difference. As I will show, an affect of technical rigor emanates from EQUAL's screenwork, steering my comrades away from their community organizing work.

Yet it would miss the mark to suggest that their digital dashboard deluded them into abandoning their radical politics—that it necessarily signifies compromised values. Instead, this book argues that the materiality of energy infrastructure requires regimes of quantification such that even the most progressive, democratic effort to solarize communities necessitates a rigorous engagement with datafied screenwork. This quantification imperative is directly related to energy's in/visibility. Specifically, kilowatt-hours (kWh), renewable energy tax credits, energy prices, and carbon metrics are the primary medium through which electricity generation becomes discernible to most people who don't directly work with the power sector's physical systems. When most of us consciously engage with our electricity generation infrastructure—when that infrastructure moves to the forefront of our considerations—we do not kinesthetically interact with the wires, cables, electrical rooms, and power plants that enable energy to effortlessly flow throughout the Global North. When most laypersons flip a light switch or charge their phones, they do not consider the violent sound of refining fossil fuels, the sprawling spatiality of transmission lines, the mechanical convulsions of petroleum extraction, or the corrosive plumes of smoke puffing out of their homes. Instead, when most of us consciously engage with electricity generation, it is through our electricity bills, reports on utility rate hikes, proposals to fight climate change with renewable energy, air-

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quality data, and activism grounded in such information. And in all of these instances, we primarily apprehend electricity through the medium of numbers. As such, most of us do not touch, smell, hear, sense, or taste the vast material substrate of our electrified existence. While we similarly do not directly see this substrate, metrics enable us to indirectly register it in a visual form that digital platforms aestheticize. This visual imperative is even more acute with solar electricity, for the process of generating energy from the sun does not entail the forms of extraction and combustion that most other electricity generation requires—intensely physical practices that one can touch, smell, taste, and disrupt with one's body—underscoring the centrality of metrics in engaging with this process. Because solar electricity is not merely quantifiable like the human body or any other datafied object but also, more specifically, apprehended primarily through data, any activism to address it must engage closely with screenwork—a point this book expands on extensively.

As such, just-transition activism employs the lenses, media, and affects of the corporate energy sector it opposes, generating a shared field of action that muddies, but never eradicates, the intersectional divisions that uphold racial capitalism. Specifically, this book contends that sustainable energy screenwork affectively cross-pollinates radical climate justice politics with technocratic ideology, diluting the normative political poles that separate the white-collar expert from the anticapitalist activist. Out of these blurred boundaries emerges what I conceptualize as the equicrat, short for the equity-minded technocrat: a liberal subject who reflexively mobilizes their technocratic prowess in service of social equity. The equicrat heuristic calls attention to the counterintuitive compatibility of grassroots governance and rule by experts under late liberalism. In theorizing this compatibility, the equicrat illuminates the performative terrain through which subjects at once reject and reproduce differential value. The NYC-based EJ organizations and sustainable energy corporations that I discuss in Subjects of the Sun collectively comprise an ideal site for exploring this equicratic reconfiguration since they both offer insights into how solar works with late liberal screenwork in ways that destabilize the normative distinctions between nonprofit activism and for-profit commerce.

Our Brownsville tour underscored the significance of this equicratic reconfiguration. For the MGA management company offered my women-of-color colleagues access to the microgrid while denying this access to their women-of-color tenants due to a late liberal elitism in which data

proficiency operates as a common ground across raced, classed, and gendered lines. Put simply, Selena could connect with the company because they all trafficked in the same energy management screenwork. But when the company viewed the microgrid through a dashboard lens, focusing on metrics to reduce their energy costs, the microgrid did not appear as a force for an *equitable* clean energy future or a means of empowering the poor people of color who occupy their properties.

So if you are one of the residents who are theoretically benefiting from this electrical upgrade, your feelings toward the microgrid are irrelevant to the company. Layperson sentiments are impertinent to renewable energy when electricity is just a set of numbers for a managerial class to optimize on a smart board. Yet if you approach the company and demonstrate some basic proficiency with their dashboard's data points, if you take on a technocratic tone and inquire how they secured the investment to bring a microgrid to the 'hood, if, in sum, you cultivate the affect of an energy professional, they will give you the view of their beloved infrastructure that they deny to Roxanne and Felicia—even if you're an outsider like my EQUAL comrades and I. This equicratic convergence, then, points to the affective power of the solar dashboard: its capacity to transform the perspectives and performances of people who have traditionally been excluded from energy governance, empowering them in the process. But the marginalization of Roxanne and Felicia suggests that this affective power is a double-edged sword; while it generates new late liberal solidarities between activists of color and white corporations, it also keeps intact the structures of racial capitalism that render poor Black women invisible.

Thus, the Brownsville case study begins to demonstrate the ways in which visual renderings of solar infrastructure (whether on Instagram or a smart board) work in tandem with solar's material properties (its diffuse spatiality and datafied power) to evoke a late liberal order in which professional work can seemingly overcome the differential value that it is in fact embedded in. These dynamics evince solar's affective power: its capacity to shape our political aspirations, everyday comportments, and unexamined predilections in ways we lose sight of when we view infrastructure only through an Instagram post, dashboard, or sightseeing tour. Subjects of the Sun aims to illuminate this affective power, uncovering how solar inspires late liberal subjects in ways that at once upend and uphold the relations of racial capitalism.



STRUCTURE OF THE BOOK

Throughout this book, I take seriously the aforementioned insight from API's propaganda: "There's energy everywhere. But sometimes it can be hard to see." For in a society that privileges sight and is powered by an electrical force undetectable to the human eye, transforming our energy system requires us to see not that invisible phenomenon but instead its physical conduits all around us: the machinery, landscapes, and bodies that generate the streams of charged electrons that otherwise elude our vision. I therefore ground my analysis in the five aforementioned material properties of solar infrastructure: sunshine, a decentralized terrain of residential rooftops in dense urban landscapes, the modularity of solar panels, the quantifiability of electrical currents, and humans' physical labor in the sustainable energy industry. In attending to these material properties, I aim to ethnographically uncover how electricity infrastructure produces not only physical power but also political possibilities, exposing how our politics are configured by the very technologies that our politics are supposed to control.⁴⁹

Chapter 1, "Shine," focuses on shiny images of pastoral solar farms in a place that couldn't be further from pastoral: NYC. These images depict anthropogenic technologies as a natural outgrowth of the nonhuman world, situating solar infrastructure in an imaginary of pure nature. As such, they suggest that solar collapses one of the foundational divisions of racial capitalism: the nature/society divide that renders the nonhuman world as extractable terrain. I show how this collapse informs late liberal visions of high-tech commodities that can paradoxically "return" alienated communities of color to a premodern state of purity, obfuscating solar's extractive supply chains and racialized production processes. However, I attribute this obfuscatory naturalization not only to the fetishistic workings of capital but also to the affective power of the sun. I suggest that the sun's material properties—its shine, glimmer, and interactions with the city's built environment—affectively animate apprehensions of solar infrastructure as a transcendent natural force, giving form to pastoralized solar images. Chapter 1 thus challenges Marxian orthodoxy on alienation and commodity fetishism under racial capitalism, foregrounding the affective power of a biospheric phenomenon in an analysis of technological transformation.

Chapter 2, "Space," introduces the corporate energy equicrat by exploring how NYC-based sustainable energy technocrats use cloud-based plat-



forms to affectively connect with marginalized spaces. It opens with a discussion of Google Earth simulations that visualize solar panels on rooftops in poor communities of color. I argue that these visual interfaces and other similar platforms work in tandem with the decentralized spatiality of sustainable energy technologies to enable (predominantly) white energy experts to work with poor communities of color, demanding that they engage closely with everyday people in intimate, personal spaces. This, in turn, transforms the political contours of energy expertise, fostering an ideologically muddied form of technocratic care that conjoins free market practice with socialist and leftist principles. As such, the cloud-based culture of energy experts taps into a late liberal imaginary that conceptualizes solar energy and energy efficiency commodities as tools for ameliorating the structural inequalities of racial capitalism.

Chapter 3, "Modules and Metrics," theorizes how the modularity of solar panels and the quantifiability of electrical currents affectively incubate the grassroots equicrat. I ground this discussion in an ethnographic analysis of two of EQUAL's graphics: an online flyer for a grassroots community solar campaign that misleadingly aestheticizes racial diversity, and a spreadsheet comparing solar installation contractors that focuses narrowly on market values. These graphics point to the ways in which justice-oriented work often operates through late liberal representations of inclusivity and idealizations of market-based equality, revealing the equicratic character of EJ activism. I suggest that solar's modularity and quantifiability accentuate this equicratic character by centering economies of scale in a mode of activism that has traditionally rejected the economizing imperatives of racial capitalism. Specifically, I contend that the power to connect and disconnect solar from the centralized grid, and the physical imperative to quantify solar's electrical inputs into the grid, enable EJ activists to participate in electricity production. This, in turn, shifts EJ activism away from the immediate bodily concerns of lowincome communities of color and toward market-based energy governance, as visions for energy democracy often focus more on the equicratic desire to produce more solar in such communities than on the stated needs of the people whom solar is supposed to serve. This has the effect of deepening EJ activism's dependence on what is often called philanthrocapitalism and orienting EJ activism toward neoliberal mandates for cost efficiency.

Chapter 4, "Bodies," focuses on the corporeality of solar work, offer-



ing a blueprint for practically transforming the relations that constitute energy infrastructure and thereby moving beyond the paradigm of differential value. I ground my discussion in social media posts that aestheticize solar installation labor as a force that can counter racial capitalism. I argue that these aestheticizations actually reveal the political constraints of late liberal imagery. As a corrective, I call for an ecosocialism that centers multisensorial relations with solar, focusing less on screenwork than the book's other three chapters. I argue that the development of solar infrastructure necessitates we see, touch, sense, consider, and work on our surroundings with a certain care that is absent in many forms of industrial-scale, fossil fuel energy production. This care is not simply an ideological concern for "the environment" but also a corporeal feel for the spaces we inhabit. As such, I suggest that the work of transforming the landscape vis-à-vis solar can cultivate a bodily attunement to the built environment. Theorizing the political power of this corporeality, I contend that the everyday labor of energy transitions can better align care for ecosystems with an intersectional pro-worker politics.

I attempt to uncover this potentiality by exploring the corporeal experiences of both blue-collar and white-collar workers in the sustainable energy industry. A labor politics that foregrounds corporeal relations with the environment can shift the work of energy transitions from monetary returns toward what is often understood as ecological return: an ecocentric ethos absent in both corporate environmentalism and EJ. Yet an overemphasis on return can neglect the fact that many marginalized workers have no place to return to—that dispossession is the precondition of Black and brown labor. As such, a pro-worker approach to energy transitions must be attuned to the complex ways in which marginalized workers navigate the space of dispossession through their physical labor, leaving room for the contradictions of environmental conservation in a megacity powered by racial capitalism. I therefore call for a just transition that brings together an intersectional labor politics and an ethos of ecological return through a closing discussion of two Black and brown worker-owned, solar-powered businesses, exploring how they balance the ecological and economic dimensions of energy transition.



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PREFACE

- 1. For an in-depth ethnographic theorization of screenwork, see Boyer, *Life Informatic*.
 - 2. Debord, Society of the Spectacle.
 - 3. T. Mitchell, Carbon Democracy.
 - 4. Ferguson, Anti-Politics Machine.
 - 5. For a related analysis, see Bond, Negative Ecologies.

INTRODUCTION. A MICROGRID ON THE MARGINS

- 1. New York City Department of Health and Mental Hygiene, *Brooklyn Community District* 16.
- 2. Throughout this book, all organization and individual names are pseudonyms, unless otherwise noted.
 - 3. Wanger, Ferwerda, and Greenberg, "Perceiving Spatial Relationships," 45.
- 4. GDSNY, "#GDSNY were very proud to be a part of the official reopening this week of 684 affordable homes at Marcus Garvey Village in Brownsville, Brooklyn," Instagram, June 10, 2017, https://www.instagram.com/p/BVKwT1lhLpD.
- 5. Broadly speaking, Tyler Wall and Travis Linnemann deploy the term *visual economy* to refer to "the production, organization, and circulation of images and the values culturally ascribed to them." Wall and Linnemann, "Staring Down the State," 138. Also see Campbell, "Geopolitics and Visuality."
 - 6. American Petroleum Institute, "Intro—2022 State of American Energy."
- 7. This ad presents a *quick* shot of an oil rig and images of petro industry workers posing in unspecified facilities, but like most fossil fuel propaganda, the ad largely abstains from showing energy production infrastructure, subordinating it to prominent visuals of what this infrastructure powers. Many other similar ads show no energy production infrastructure whatsoever.
- 8. Brooklyn SolarWorks, "#SolarPower in the Big **d**! With our tilt rack mounting solution, flat roof installation is a breeze. Get ready #NYC, we're coming for ya," Instagram, November 18, 2022, https://www.instagram.com/p/ClHkdaq OCHz.
- 9. Solar Uptown Now Services, Instagram, September 28, 2019, https://www.instagram.com/solar.uptown.now.services.



- 10. NASEO, Diversity.
- 11. See, for instance, NASEO, Diversity.
- 12. This sentiment is aptly laid out in Luke and Heynen, "Community Solar."
- 13. De Onís, Energy Islands; Luke and Heynen, "Community Solar."
- 14. Lennon, "Decolonizing Energy."
- 15. Mulvaney, "Solar's Green Dilemma"; Lennon, "Energy Transitions"; Nugent and Sovacool, "Lifecycle Greenhouse Gas Emissions."
 - 16. Lerner, Sacrifice Zones.
- 17. On the centrality of screens, surveillance, and, by extension, sight to the modern world, see Browne, *Dark Matters*; Scott, *Seeing like a State*; Kavanagh, "Ocularcentrism and Its Others."
- 18. Robinson, *Black Marxism*; "differential value" is from Melamed, "Represent and Destroy."
 - 19. Wang and Lloyd, Sins of a Solar Empire; Lennon, "Postcarbon Amnesia."
- 20. For arguments that solar can make the capitalist status quo sustainable, see, for instance, Hawkin, Lovins, and Lovins, *Natural Capitalism*; Ikerd, *Sustainable Capitalism*; Matthews, *Greening of Capitalism*. For arguments that solar can disrupt the dominant political economy, see, for instance, Carroll, "Fossil Capitalism"; Schweickart, "Is Sustainable Capitalism Possible?"; Klein, *This Changes Everything*; De Onís, *Energy Islands*.
 - 21. Strathern, Relations.
 - 22. Strathern, Relations.
 - 23. Yusoff, Billion Black Anthropocenes.
 - 24. Robinson, Black Marxism.
 - 25. Melamed, "Racial Capitalism."
- 26. Lennon, "Decolonizing Energy." For more on the ways in which energy infrastructure (and solar infrastructure, in particular) materializes, exacerbates, and gives form to differential value and social hierarchy—especially under the auspices of capitalism—see Cross, "Capturing Crisis"; Dean "Uneasy Entanglements"; Winther, Ulstead, and Saini, "Solar powered."
- 27. Larkin, "Politics and Poetics of Infrastructure"; Harvey, "Cementing Relations."
- 28. On energy as a capacity immanent in certain things, see Berry, *Unsettling of America*. On energy's ability to transform matter, see Stone, "Neglected Topic." On the slave trade as the first industrial-scale energy infrastructure, see Lennon, "Decolonizing Energy."
- 29. Lennon, "Decolonizing Energy." For an in-depth look at the ways in which racial capitalism continues to reproduce long-standing differential value in contemporary times, see Pellow and Park, *The Silicon Valley*, Pulido, "Geographies of Race."
 - 30. Larkin, Signal and Noise; Starosielski, Undersea Network.
- 31. On Blackness as the paradigmatic form of racial difference, see Fanon, *Black Skin, White Masks*; Wilderson, *Afropessimism*.
 - 32. Povinelli, "Social Projects."

- 33. Povinelli, Cunning of Recognition.
- 34. Boyer, Life Informatic.
- 35. Fleetwood, Troubling Vision.
- 36. Turow and Tsui, Hyperlinked Society.
- 37. Hernández and Bird, "Energy Burden."
- 38. J. Adler, "Origins of Sightseeing"; Tuttle, "Trip to the Zoo"; Pratt, *Imperial Eyes*; Fullagar, *Savage Visit*.
- 39. On the sightseeing tour as a colonial mode, see Carville, "Photography, Tourism."
 - 40. Nagel, View from Nowhere.
 - 41. Ducarme, Luque, and Courchamp, "What Are 'Charismatic Species."
- 42. For a classic account of the relationship between positionality, power, and the illusion of contextless knowledge, see Haraway, "Situated Knowledges."
 - 43. Solar Foundation, 2017 U.S. Solar Industry Diversity Study.
 - 44. Nader, "Politics of Energy."
 - 45. Nader, "Politics of Energy."
 - 46. Massumi, "Autonomy of Affect."
 - 47. Berlant, Cruel Optimism, 16.
 - 48. Ngai, Ugly Feelings, 27.
- 49. Boyer, *Energopolitics*; T. Mitchell, *Carbon Democracy*. In the case of solar, this technological agency often operates through late liberal screenwork, affectively animating specious imaginaries of a solar-powered world beyond racial capitalism. Each chapter, then, attends to the interplay of this screenwork and solar's material properties to elucidate the ideological affordances of infrastructures often narrowly conceptualized in terms of physical and economic needs.

CHAPTER 1. SHINE

- 1. C. Adams, "Appreciative Engagements with Slideware."
- 2. Gabriel, "Tyranny of PowerPoint."
- 3. Robles-Anderson and Svensson, "'One Damn Slide."
- 4. King, Black Shoals.
- 5. For a cross-cultural history of sun worship see Singh, Sun; for an overview of the sublime see Cronon, Uncommon Ground.
 - 6. Cronon, Uncommon Ground.
- 7. For more information on how renewable energy reproduces the extractive order, see Howe, *Ecologics*; Rignall, "Solar Power, State Power"; Folch, *Hydropolitics*.
 - 8. Marx, Economic and Philosophic Manuscripts.
 - 9. Wang and Lloyd, Sins of a Solar Empire.
 - 10. L. Murphy and Elimä, In Broad Daylight.
- 11. L. Murphy and Elimä, *In Broad Daylight*; Wang and Lloyd, *Sins of a Solar Empire*.
 - 12. See, for instance, Wollerton, "US Solar."
 - 13. Wang and Lloyd, Sins of a Solar Empire.



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