UC Riverside
UC Riverside Previously Published Works

Title
Abolition-democracy and the future of climate change

Permalink
https://escholarship.org/uc/item/06n165qf

Author
Miyake, Keith K

Publication Date
2024

DOI
10.1177/25148486241287028

Copyright Information
This work is made available under the terms of a Creative Commons Attribution-NonCommercial License, available at https://creativecommons.org/licenses/by-nc/4.0/

Peer reviewed

eScholarship.org Powered by the California Digital Library
University of California

Check for updates

Article

E Nature and Space

EPE: Nature and Space
1–21
© The Author(s) 2024

Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/25148486241287028
journals.sagepub.com/home/ene

Abolition-democracy and the future of climate change

Keith K. Miyake
University of California Riverside, USA

Abstract

The world is already in climate “crisis” mode. Fossil fuels are the largest driver of climate change, and eliminating their use is an important step toward addressing the future of climate change. Yet, I argue that eliminating fossil fuel use alone is insufficient to address the crises not only of climate change, but the uneven effects of climate change and fossil fuel racial capitalism as they play out across the world. Building on the work of W.E.B. Du Bois in thinking through the establishment of abolition democracy in the post-emancipation project of Black Reconstruction, this article offers a conceptual analysis of why and to what end such a framework is essential to building a radically democratic society rooted in liberation for all. The article looks toward an abolitionist energy democracy, where abolition democracy offers guiding principles for developing theory and organizing praxis. Using a case study of the People Power Solar Cooperative in Oakland, California, USA, the article considers how people are working to dismantle fossil fuel racial capitalism through the simultaneous building up of new institutions and infrastructures in the spirit of abolition democracy. This article thus considers a notion of abolition democracy rooted in not just the elimination of a system of dominance, but the simultaneous remaking of new systems as an important way of thinking about fighting for social and ecological change.

Keywords

Abolition democracy, climate change, energy democracy, fossil fuel racial capitalism

Introduction

As I write this, billions of people around the world have experienced sweltering heat waves, with some of the hottest temperatures on record. This comes after years of increasing average global temperatures. Combined with flooding, drought, famine, and wildfires, this signals the already-existing presence of climate crises.[1] The severe impacts of global climate change are here and will only get more intense as carbon emissions continue to rise. While climate change is a problem for humanity, the more-than-human world, and our collective environments, impacts from climate change occur

Corresponding author:
Keith K. Miyake, Ethnic Studies, University of California Riverside, Riverside, CA, USA.
Email: kmiyake@ucr.edu

unevenly along lines of Indigeneity, race, class, gender, sexuality, ability, age, species, and geography. Many of these differences are attributable to existing forms of environmental injustice spurred by historically and geographically grounded structures of fossil fuel racial capitalism.

By fossil fuel racial capitalism, I am referring to the uneven production of fossil fuel related emissions and historically specific forms of environmental change through processes like land expropriation and plantations, slavery and industrial capitalism, militarism and (settler) colonialism. It is the conjuncture of a fossil fuel-driven political economy that manifests exploitation along forms of racism produced by, and productive of, the rhythms of racial capitalist accumulation. It builds on Luke's and Heynen's (2020) concept of "petro-racial capitalism" by recognizing the global dominance of fossil fuel-based hydrocarbons—petroleum, coal, and natural gases—and Fairchild's and Weinrub's (2017) "fossil fuel capitalism" by recognizing that all capitalism is racial (see also Gonzalez, 2020). Jodi Melamed (2015) describes racial capitalism as the idea that

> Capital can only be capital when it is accumulating, and it can only accumulate by producing and moving through relations of severe inequality among human groups…These antinomies of accumulation require loss, disposability, and the unequal differentiation of human value, and racism enshrines the inequalities that capitalism requires. (77)

This is not to say that other political economic systems have not historically contributed to the acceleration of carbon emissions. It only names the pernicious driving force behind the simultaneous oppressions of fossil fuel-driven environmental change and racial capitalist accumulation.

The production of carbon emissions, resistance to liberatory social change, and structure of energy industries are entwined with, and therefore demand the abolition of, fossil fuel racial capitalism. That is, the industrial production of carbon emissions is inseparable from the drive for energy profits on the one hand, and its exploitation of racialized and gendered divisions of labor on the other. This relationship has roots in colonialism, slavery, labor expropriation, and technological growth (see Vergès, 2017). The environmental, social, and health burdens of these relations sediment within populations rendered exploitable, surplus, or expendable within the logic of racial capitalism. This has historically manifested through segregation, organized abandonment, genocide, deportation, and carcerality, but it also reveals historical and ongoing moments of, and potentialities for radical Black, Indigenous, queer, labor, and other interconnected forms of resistance. The point is that the outcomes of historical change are never a given but emerge through conflict and get shaped by the struggle between insurgent and counterinsurgent forces. The future of climate change depends on the theoretical tools and organizing work of building insurgent practices against the drivers of fossil fuel racial capitalism (as well as "green capitalism") and their unending, counterinsurgent drive to reproduce and renovate themselves.

In looking to the future of climate change, I want to ask what types of politics and horizons we might look to in efforts to address climate change in the image of radical forms of democracy and liberation. The elimination of fossil fuel racial capitalism is one place where we might begin this work. However, this process can never be fully realized without a complete reworking of the entire structure of energy production and all the social and environmental relations congealed therein. For this task, I turn to the concept of abolition democracy developed by Du Bois (1935) to think about politics rooted in place (see also Gilmore, 2017), which can take on the abolition of fossil fuels as a joint project of keeping fossil fuels in the ground and developing new institutions and infrastructures to support a world more liberatory for all. In particular, this article considers the possibilities for making abolition democracy in the face of climate change through interventions rooted in an abolitionist energy democracy that seeks to remake our relationships to energy production and each other.

For Du Bois (1935), abolition democracy represented the political project of radically remaking the US after emancipation during "Black Reconstruction" in the image of radical democracy.

This would occur through the building of new institutions, infrastructure, and laws to ensure the full enfranchisement of former slaves and freedom for all. Other scholars, such as Davis (2011a), Lester (2021), Lipsitz (2004), and Heynen and Ybarra (2021) have taken up the concept of abolition democracy to consider how we go about the work of remaking society in terms of prisons and warmaking, the state, global justice, and political ecology. In this article, I bring the concept of abolition democracy to bear on the future of climate change. I argue that this necessitates people working toward their own liberation (see Du Bois, 1935; Sandler, 2021) by reworking the political structures of liberal democracy; remaking racial and environmental relationalities, and redistributing wealth and power through systems of reparation and reconciliation. The period following the US Civil War provided fertile ground for Black Radicalism to take root through experiments in abolition democracy. The contemporary crises surrounding climate change hold similar possibilities. And we must learn from the failure of abolition democracy to take hold during Black Reconstruction by working to dismantle and remake the structures of racial capitalism, (settler) colonialism, and white supremacy that produce counterinsurgent blocs that work to violently reproduce the status quo (see Rodríguez, 2021).

In what follows, I build the case for thinking through the contradictions of fossil fuel racial capitalism and the future of climate change through an abolitionist lens based on the political perspective of Du Bois's abolition democracy. If racial capitalism and (settler) colonialism have long produced various forms of death-dealing environmental change—with climate change being one of the most pressing today—then any attempt to meaningfully address this issue must take seriously the question of how to alter the social and political relations that already exist in order to imagine any sort of a more liberatory future. The question then becomes not about eliminating fossil fuel extraction and consumption alone, but about transforming the political structures that shape both the uneven production of carbon emissions and the oppressive operations of the state and society. Through abolitionist approaches to energy democracy, this article argues for the development of theory and praxis that looks to abolition democracy as a guide to short-term action with long-term consequences for social and environmental relations.

Energy democracy is a framework—sometimes murky in definition (Droubi et al., 2022; Szulecki and Overland, 2020; Wahlund and Palm, 2022; Welton, 2018)—for the collectively owned and controlled, sustainable, and often decentralized means of energy production, rooted in the principles of social, racial, environmental, and economic justice (Fairchild and Weinrub, 2017). An abolitionist approach to climate change and energy democracy begins from the premise that the world needs to take steps to completely stop the extraction and consumption of fossil fuels. But it must go beyond just fossil fuels to address the broader web of forces that sustain unfreedoms and inequalities globally, which make the impacts of climate change so deadly for much of the world's population. That is, it calls for thinking not just in terms of carbon emissions and transitions to renewable and net-zero energy production, but in terms of the broader aspects of social and environmental ills that make people more vulnerable to the forces of, and factors contributing to unnatural climate change disasters.

This article contributes to the literature on abolition democracy by bringing the concept to bear on climate change and expands discussions on energy democracy through an abolitionist lens. Here, I distinguish abolition from abolition democracy in that the former is a politics rooted in dismantling systems of oppression and making dreams a reality, while the latter is a social relation to be realized through abolitionist worldmaking. To this end, the article uses a case study of the Oakland, California, USA-based People Power Solar Cooperative which is experimenting with abolitionist energy democracy and mutual aid as an example of ways that people are increasingly engaging in projects implicitly grounded in making abolition democracy. While small in scale, this cooperative presents a model for beginning the work of transforming social relations around abolitionist energy democracy and climate justice. I turn to an abolitionist energy democracy

framework as a way of considering the need for developing social and political perspectives that center abolition democracy in responses to climate change. I view the contemporary moment as demanding radical work to forge new institutions, infrastructures, and practices rooted in abolitionist world-making. I argue that abolitionist energy democracy provides an avenue for rethinking the structure of energy production while opening possibilities for implementing democratic, non- or anti-capitalist, and self-determined and community-controlled social relations.

The first section of this article explores the concept of abolition democracy. The next section examines energy democracy as one place to start implementing abolition democracy. The next three sections examine a case study on the People Power Solar Cooperative and their implementation of abolitionist energy democracy. I conclude with thoughts about what abolition democracy means for the future of climate change.

Abolition democracy

Guiding my inquiry is the question of how Du Bois's political perspective of abolition democracy elucidates the problem of achieving a radical transformation of the systems upholding fossil fuel racial capitalism. In *Black Reconstruction in America*, an indispensable work on Black revolutionary action during and following the US Civil War, Du Bois (1935) meditates on the necessity of abolition democracy, which was a never-fully-realized possibility in transforming US society in the wake of racial chattel slavery. Abolition democracy rejects abolition as only a project of emancipation from racial chattel slavery, as "not simply abolition of legal ownership of the slave; it meant the uplift of slaves and their eventual incorporation into the body civil, politic, and social, of the United States" (Du Bois, 1935: 189). It instead "went beyond this because it was convinced that there was no logical stopping place; and it looked forward to civil and political rights, education and land, as the only complete guarantee of freedom" (Du Bois, 1935: 239). Du Bois, by way of prominent abolitionists of the era, shows how the struggle for abolition democracy was about the fight for economic freedom, education, and power alongside the simultaneous dismantling of capitalism and white supremacy.

In other words, abolition democracy calls both for the tearing down (emancipation) and the simultaneous building up of new and renovated democratic institutions (Davis, 2011b; Gilmore, 2017). Thus, as Heynen (2021) states, "This new political ideal, the simultaneous abolition of slavery and creation of an actual democracy, necessitated a complete reinvention of democracy itself to allow for freedom to prevail in everyday life" (99). Ruth Wilson Gilmore elaborates on this,

> since slavery ending one day doesn't tell you anything about the next day—Du Bois set out to show what the next day, and days thereafter, looked like during the revolutionary period of radical reconstruction. So abolition is a theory of change, it's a theory of social life. It's about making things. (qtd. in Petitjean, 2018)

For Du Bois, this necessitated increased power of labor and poor people against industrial capital —a dictatorship of labor and industrial democracy—in part through capture of the state, physical force, and political power. Abolition democracy was at one point a real possibility, yet it was crushed in large part due to the counterinsurgent forces of white supremacy and the alliance between the Southern planter and Northern capitalist classes (Du Bois, 1935). It was from this conflict that new institutions of unfreedom arose such as Black Codes, lynching, chain gangs, and Jim Crow. However, these in turn spawned new forms of Black radical resistance from the Second Reconstruction to the contemporary prison and police abolition movements.

As Heynen and Ybarra (2021) explain in developing the concept of abolition ecologies, "*Black Reconstruction in America* walks us through a sequence and logic of revolution that helps show the

power of abolitionist politics, but also the unrealized promise of these politics" (23). Furthermore, Gilmore posits that

> If unfinished liberation is the still-to-be-achieved work of abolition, then at bottom what is to be abolished isn't the past or its present ghost, but rather the processes of hierarchy, dispossession, and exclusion that congeal in and as group-differentiated vulnerability to premature death. (2017: 228)

This can also be applied to thinking about the ravages of climate change. If climate injustices operate through racism and geographical differentiation (Gonzalez, 2020), then an abolitionist climate justice carries forward the project of liberation by abolishing those structures of dominance (Ranganathan and Bratman, 2021; Sze, 2021) while "making things" to carve out new institutions in the spirit of Du Bois's abolition democracy.

The contemporary prison abolition movement and subsequent uptick in abolitionist politics around prisons (Davis, 2011b; Kushner, 2019), police (Camp and Heatherton, 2016), borders (Gill, 2020; Miyake, 2023), and climate justice (Ranganathan and Bratman, 2021; Sze, 2021) are notable for their expansion and refining of the terms of abolition and abolition democracy. As one example, Davis, building on the work of Du Bois, views abolition democracy as "the creation of an array of social institutions that would begin to solve the social problems that set people on the track to prison, thereby helping to render the prison obsolete" (2011a: 96). This highlights the underlying motive of a politics centered around abolition democracy to fundamentally rework society in myriad ways to change the way we understand the need for institutions not just of punishment, but of sustaining and affirming life. Prison abolition can be understood as a related but separate project from Du Bois's abolition democracy in the wake of racial chattel slavery, but which resonates because it is focused on the carceral institutions that grew as a result of the incomplete project of post-emancipation abolition democracy (Davis, 2011a).

While distinct from the social relations of prisons or racial chattel slavery, the abolition of fossil fuel racial capitalism might still be understood as a project of making abolition democracy. This is because of the impulse to render both fossil fuels and racial capitalism obsolete through the creation of new institutions that address the problems associated with the structures of white supremacy and (settler) colonialism, along with the exploitation of the environment and racialized divisions of labor for the purposes of capital accumulation. It also demands a reorientation around what it means to enfranchise marginalized and surplus populations in building toward self-sufficiency through and against the state to address multiple social, political, and economic "crises" spurred by climate change. It is through the interplay between fossil fuel-turned-green racial capitalism, the state, and abolitionist struggles for climate justice that new institutions and social relations will emerge. These are the conjunctures that I elaborate on through this article's case study, where mutual aid and radically democratic self-governance establish new community-based institutions and social relations rooted in abolition democracy.

The making of abolition democracy in the wake of fossil fuels operates not only in the negative of tearing down the fossil fuel industry, but in the positive sense of reimagining and remaking society, including the state, through radically democratic institutions (see Davis, 2011a). Efforts to reduce carbon emissions alone are incomplete projects doomed to reproduce existing inequalities and vulnerabilities within society as fossil fuel-turned-green racial capitalist institutions adapt and reinvent themselves (Steinberg, 2010). I posit that abolition democracy, on the other hand, demands we begin to think about how to build new institutions that address the burdens of climate change and fossil fuel racial capitalism to work toward liberation. If the impetus for addressing climate change is to sustain the human and more-than-human—which perhaps for capitalism it is not—then without the abolitionist project of simultaneously building up new institutions and social

relations, what we are left with is continuing oppressions driving premature death and destruction. That is, abolition democracy, as a potential—but not given—outcome of abolitionist organizing around climate justice and fossil fuel racial capitalism, is a constant struggle to make life precious (see Gilmore, 2023).

In considering the need to build abolition democracy in the face of fossil fuel racial capitalism, this article is informed by the abolition geographies and abolition ecologies frameworks developed by Gilmore (2017) and Heynen (Heynen, 2016a, 2016b; Heynen and Ybarra, 2021), respectively. For Gilmore, abolition geographies are the place-based, spatially elaborated forms of abolition democracy. For Heynen, abolition ecologies as a "notion is to push forward through well-informed and deliberate organizing and continued theorizing against and about the continued existence of white supremacist logics that continue to produce uneven racial development within land and property relations" (2016a). This notion also includes the types of organizing that seek to transform the structures of fossil fuel racial capitalism through place-based initiatives like the People Power Solar Cooperative discussed below. Heynen and Ybarra (2021) go on to

> define abolition ecology in the same logical parameters as DuBois' democracy and Gilmore's geography to say that abolition ecology seeks to build intuitions and processes that are explicitly focused on the political ecological imperatives of access to fresh air, clean water, sufficient land, amelioration of toxic chemicals, and beyond. (27)

This article builds on this previous work by considering both the spatial/place-based (and human-environment) dimensions of abolition geographies and the "political ecological imperatives" inherent in abolition ecologies. Furthermore, it focuses explicitly on abolition democracy to emphasize the sociopolitical milieu and modes of (self) governance involved in how communities begin to address the future of climate change.

In opposition to the liberal democratic state, as it existed prior to emancipation, Lester argues that "Du Bois's abolition democracy then was one where the predominant problem was the inability for black freedmen to organize and fully control the apparatus of the state to fight white supremacist violence" (2021: 3083). That is, a transformation of the state itself into a vessel for Black liberation and control of the legitimate use of violence toward abolition democracy. Lester continues, "State power, as a form of legitimate coercion, was not in itself bad but instead Du Bois argues was only a problem when it was used for destroying, rather than expanding, the abolition democracy" (2021: 3083). I argue that the state, wrested from the white supremacist, violent, militarized, and racial capitalist hegemonic blocs, can potentially be instrumentalized toward the goals of abolition democracy. The question, then, is to what extent can the state be leveraged and transformed in service of abolition democracy and abolitionist energy democracy, and how might people otherwise work around it or against it through, for example, decolonial politics and self-determined mutual aid.

With regard to climate change, abolition democracy calls for dismantling the historical and ongoing uneven harms in the process of addressing climate change. Considering abolition democracy requires thinking about the death-dealing presence of climate change alongside a critical analysis of the webs of interconnected forces driving historical environmental injustices, countered through multi-scalar and multipronged politics (see Ranganathan and Bratman, 2021; Sze, 2021). I argue that such an approach decenters the role of the state (see Pellow, 2018) and the "liberal-humanist figure of Man … as the master-subject" (Yusoff, 2018: 55) of technofixes[2] to climate crises. It instead looks to wholesale change that centers the most marginalized humans and the more-than-human. This opens up the possibilities for what is entailed in combatting climate change to a complete reworking of, and seeking alternatives to, the dominant social, political, epistemological, philosophical, and material conditions of contemporary society.

Abolitionist energy democracy

This article considers building abolition democracy through the development of new energy systems based on a framework of abolitionist energy democracy. This is because fossil fuel racial capitalism is central to the oppressions of climate change, and abolishing it requires developing alternative energy and political economic systems that work toward abolition democracy. I argue that abolition democracy provides a framework for considering the democratization of energy systems, governance, and means of production while contemplating the vexed role of the state to for its capacities to both secure these racialized and environmental social relations on the one hand and vehemently oppose structural change on the other (Hamlin, 2023; Hardy et al., 2022; Miyake, 2021). Energy democracy is one of the most popular frameworks for reconsidering the production of energy and implementation of alternative energy systems. This might take shape in projects such as community/cooperative solar and wind power generation or publicly owned and community-controlled municipal energy systems (Wahlund and Palm, 2022; Weinrub, 2017).

Energy democracy potentially represents a paradigmatic shift (Fairchild, 2017) in how energy production is governed, the scales at which it occurs, and the people who benefit most from it. It decentralizes and seeks to erode the power of large-scale energy conglomerates (née oil companies) and fossil fuel exporting countries. It requires the development of new democratic governance and decision-making structures that support community self-determination while centering the voices of workers and the most vulnerable and marginalized segments of society (Wahlund and Palm, 2022). It further demands community (particularly Indigenous) consultation over how and where development gets implemented, materials get sourced, and integration with energy networks takes place. Building on the previous energy democracy literature, an abolitionist perspective on energy democracy, then, highlights the strands of energy democracy focused on not just reducing carbon emissions, but eliminating fossil fuel racial capitalism while reimagining what radical democracy might look like beyond liberal forms of voting, participation, and representation.

Energy democracy is particularly well suited to consider the need for abolition democracy because it provides opportunities for thinking about how abolitionist politics might inform struggles against top-down, colonial, and racial capitalist “solutions” to climate change problems and fossil fuel consumption. For example, energy democracy in general asks tough questions about who develops, controls, and benefits from renewable energy systems (Fairchild and Weinrub, 2017). Yet an *abolitionist* energy democracy is about more than just new forms of energy production and including marginalized voices in that process. It is about transforming the underlying conditions and power relations of energy production and renovating the breadth of social and environmental relations on a fundamental level. Gilmore makes clear about abolition in general that it “is deliberately everything-ist; it’s about the entirety of human-environmental relations” (qtd. in Kushner, 2019). So too is an abolitionist energy democracy everything-ist in scope, even as it gravitates around fossil fuel racial capitalism and climate change. An abolitionist energy democracy must, “Now, more than ever…guard against cooptation, reformist takeovers, and the rehabilitation or redemption of institutions and practices that are intolerable” (Abolition Collective, 2020: 2). It is not about making the system “better,” it is about dismantling and rebuilding the system altogether. As I discuss below, this applies to all the different players in energy production, from the state to energy producers to utilities to the communities they serve.

A growing number of scholars and organizers have called for and offered strategies toward energy democracy (Fairchild and Weinrub, 2017; Szulecki and Overland, 2020). Some, like Denise Fairchild (2017) and Luke and Heynen (2020), directly link energy democracy to abolitionist politics. They argue that energy democracy embodies an “abolitionist ontology,” that reorients “norms, values, and strongly held beliefs about property, profit, power, and privilege” (Fairchild qtd. in Luke and Heynen, 2020: 614–615). Luke and Heynen (2020) write about projects like

community solar as being potentially linked to abolitionist politics of "reparative energy infrastructures" that make amends for the ongoing legacies of slavery, settler colonialism, and "petro-racial capitalism" by helping people—particularly low-income, Black, and Indigenous communities—in "securing economic self-determination, addressing harms, and changing 'laws, institutions, and systems' to ensure 'that harm will not happen again'" (605). The case study discussed below demonstrates how abolitionist ontologies around energy production pave the way for reparative politics and radically democratic self-governance through mutual aid and land-based initiatives.

In a similar vein, Ryan Stock (2023) calls for "abolition solarities" that are "Antiracist and anticapitalist approaches to solar interventions [that] can potentially transform social relations and empower the victims of energy injustices. Abolition solarities avail emancipation and redistribution through dismantling white supremacist processes and logics that structure energy regimes" (3). They continue, "establishing the mattering of nonwhite lives in the transformation of matter into energy will require nothing short of the total abolition of racial power structures that enshrine inequalities in colonial-capitalist accumulation" (3). This indicates that an abolitionist approach to fossil fuels must seek to address the myriad webs of dominance that structure contemporary fossil fuel racial capitalism. In aiming to change the systems that sustain fossil fuel racial capitalism and ensure that those systems do not reemerge under a different guise, this represents a real step toward abolition democracy and developing new relationships within communities. This article contributes to the literature through a central focus on abolition democracy as a lens to critically examine how governance, self-reliance, and new institutions might begin to emerge through abolitionist energy democracy initiatives.

As opposed to other theories of social change, abolition democracy, and its related frameworks of abolition ecologies and abolition geographies, is vital to thinking about energy democracy because it brings with it the notion that the end of fossil fuels alone is not equivocal to freedom. Recognizing the mutually constituting and "articulated" (Hall, 1980) structures of dominance congealed within the state requires an energy democracy framework that necessarily centers anti-racism, feminism, queer and trans liberation, anti-capitalism, and decolonization in the establishment of energy democracy throughout the reorganization of labor, land, political economy, and participatory governance. For as Laurel Mei-Singh (2022) writes, "Environmental problems are indeed embedded in existing sociopolitical structures, and it is only through tackling both that we can open pathways that lead us from the present crisis." Therefore, a vision for abolitionist energy democracy is about enfranchising and centering the voices of marginalized and surplus populations, concurrently with the establishment of radically democratic institutions structured in reciprocity, reparations, recognition, and consent (see Whyte, 2020).

An abolitionist vision for energy democracy is a call for reorganizing energy production in ways that shift balances of power toward smaller-scale public control and democratic processes of collective decision making while seeking to undermine fossil fuel racial capitalism. Rather than being viewed as a technofix to the problems of fossil fuel racial capitalism (see Stock, 2021), energy democracy should be thought about in terms of a process of moving toward an abolitionist future by building on existing abolitionist organizing in the present that is guided by principles like reparation, dignity, and dismantling systems of oppression, particularly those struggles deriving from the Black Radical Tradition (Robinson, 2000) and movements for Indigenous decolonization. As a practical matter, this might mean finding ways for longstanding community-based organizations already working on campaigns around social, labor, environmental, and climate justice to look at the development of new community-based energy production and aggregation projects grounded in radically democratic governance mechanisms (see Behles et al., 2020). It is the process of developing such projects and experimenting with new methods of centering marginalized and surplus populations within forms of communal ownership and control that gesture toward abolition democracy.

In resisting the existing fossil fuel-dominated, profit motivated energy industry, abolitionist energy democracy pushes for non- and anti-capitalist orientations, as well as against neoliberal privatization, market ideologies (Burke and Stephens, 2018), and racial capitalism. It strives to decommodify energy production and ideally socialize the workplace through distributed or worker owned means of energy production. It repositions the energy sector around free and renewable energy sources while also looking to non-capitalist, cooperatively governed renewable energy production beyond centralized private energy utilities. Particularly when energy democracy takes electricity production out of the free market, this process—and potentially, a transformed state that has the capacity to facilitate such a move—fundamentally alters the political–economic relations of energy production. This is part of a shift away from capitalist energy production toward collective ownership of the means of production. It has the potential to upend surplus value production and capitalist growth imperatives by emphasizing the use value of energy over its exchange value (and thus the production of profits), and the democratic/socialized (not necessarily state) control of surpluses, either as reinvestments, reducing energy bills, or providing seed funds for multiplying abolition solarities (see Stock, 2023). In this sense, energy democracy does not necessarily support the continued expansion of capitalist energy production but does build new institutions and infrastructures of radically democratic governance.

There are important critiques of the energy democracy framework, which point out that, among other things, liberal democratic processes alone cannot deliver liberation. Therefore, some advocate for the substitution of the language of energy democracy with energy justice (Droubi et al., 2022). Liberal democracy and populist democratic processes are never guaranteed to, or even in many cases likely to produce socially and environmentally just outcomes on their own (Mann, 2013). This is where the concept of abolition democracy might be instructive. Semantics aside, the form of abolitionist energy democracy advocated in this article is inherently focused on justice through principles of total liberation. Therefore, I do not delineate a clear distinction between energy democracy rooted in radically abolitionist notions of democracy, and energy justice, even though the language around energy democracy is perhaps bogged down with the contradictory history of the mainstream energy democracy movement (Droubi et al., 2022; Szulecki and Overland, 2020). The language of energy democracy, then, is maintained because of its use by organizers of abolitionist projects like the People Power Solar Cooperative. Its emphasis on democracy as a cornerstone of what I would argue is the movement's underlying—if sometimes undertheorized—justice motives, signals the potential for radically rethinking what democracy means if it is understood through an abolitionist lens. Hence, abolition democracy.

Energy democracy must be rooted not just in procedural notions of democracy and justice sanctioned by the state, but in approaches to self-determination and energy sovereignty that are often critical of the state because of its role in reproducing uneven power relations (see Hamlin, 2023; Pellow, 2018; Pulido, 2016). An abolitionist energy democracy rooted in abolition democracy must therefore be not just about building new laws and institutions within the state, but also about developing new semi- or fully-autonomous institutions beyond the state that enact radically democratic principles and modes of governance (Lipsitz, 2004). As the case study below demonstrates, this might take shape through experiments in mutual aid oriented around transforming community social relations to each other and to energy production. Abolitionist energy democracy must take aim at the state in less-than reconciliatory ways that instead maintain pressure on the existing power structures dominant within the state and racial capital, and continually seek to form alternative structures of abolition democracy that both operate outside the purview of the state and in ways that seek to fundamentally change it.

Abolitionist energy democracy, and indeed broader notions of radically democratic public infrastructure, can pave the way to a society structured in abolition democracy. Along with this must come programs to ensure that democratic systems are responsive to marginalized and surplus

populations that often lack the infrastructure, capacity, and means to meaningfully engage in these systems. In what follows I examine a case study in abolitionist energy democracy that highlights the potential for decoupling community energy production from fossil fuels while simultaneously building community capacity, mutual aid, and radically democratic self-governance models.

Making abolition-democracy

The People Power Solar Cooperative established itself in Oakland in 2018 to fight for energy democracy. Their mission is "to create pathways for communities to participate in the energy transition despite the lack of viable community solar policies…to build grassroots-led and community-governed energy" and to "create alternatives to…private utilities by decentralizing, democratizing, distributing, and diversifying the energy system. Ensuring that power to live can be accessed by all without compromising the health and safety of any community, today and for generations to come" (People Power Solar Cooperative, n.d.a, n.d.b). They focus on "low-income communities, communities of color, and frontline communities that have been disproportionately harmed by our fossil fuel economy," and envision a "just transition" to renewable energy that centers democracy and self-determination where communities "democratically shape the energy sector and have long-term access to and control over energy so that we can build wealth, health, and jobs for ourselves and future generations" (Huang, 2022). Finally, they "practice and prioritize community self-determination regarding the development, governance, and control of energy resources" (People Power Solar Cooperative, 2021). Their member base consists of people from all across California, including many people who work with other environmental and climate justice organizations. However, the main focus of their work is on Oakland, serving diverse, primarily working-class communities, including both renters and homeowners, and people who struggle to afford their electricity bills.

Toward the ends of abolition democracy and guiding the work and commitments of the cooperative is their Shared Values and Purpose of the Energy Democracy Project that all members agree to adhere to. This "living" document outlines principles such as their working "together for our collective liberation over systems that divide and exploit (intentionally and unintentionally) people and the Earth" and how they "acknowledge our inextricable interdependence on the Earth and all other living creatures and therefore commit to protecting and defending our human rights, water, land, air, and ecosystems as we fight for our collective liberation" (People Power Solar Cooperative, 2021). In multiple ways they convey notions of non-capitalist energy relations and the prioritization of community self-determination. Striking at the underlying structures of unfreedom, these values link the work of building energy democracy and a just transition to the abolitionist work of transforming human-environment-energy social relations, all while committing to repairing historic harms and principles of decolonization. These are the types of principles that fuel abolition democracy.

It is unsurprising that the People Power Solar Cooperative would surface in a place like Oakland. The city, which occupies traditional Ohlone lands, is host to a number of climate action initiatives. In addition to a Climate Emergency and Just Transition Resolution and a 2045 Carbon Neutrality Goal, one of the most notable government initiatives is the Oakland 2030 Equitable Climate Action Plan, adopted by the city council in 2020. It "establishes actions that the City and its partners will take to equitably reduce Oakland's climate emissions and adapt to a changing climate" (City of Oakland, 2020). It intends to center racial equity and frontline communities as part of the city's broader climate goals (Tobias et al., 2020). This plan was shaped in part through efforts by the broad-based and cross-sector Oakland Climate Action Coalition, whose leadership overlaps with that of the People Power Solar Cooperative. This coalition, whose membership includes over thirty community-based organizations, environmental justice groups, green businesses, and labor

unions, focuses its attention on, among other things, adaptation, resilience, food justice, land access, transportation, renewable energy, green jobs, and sustainable development (Oakland Climate Action Coalition, n.d.; Weinrub, 2009). Equitable climate change adaptation and resilience are important for Oakland in particular because it has a high rate of “social vulnerability” to the impacts of climate change, such as flooding, extreme heat, and wildfires (Garzón et al., 2012). A working group co-organized by the Oakland Climate Action Coalition and others also expressed major concerns about worsening air quality as well as water, food, and energy prices (Garzón et al., 2012). The People’s Power Solar Cooperative emerged in part to address some of these concerns.

The People Power Solar Cooperative has engaged in several different initiatives to realize energy self-determination and reduce reliance on private utility companies. Their cooperative initially used the investment from member shares to finance microgrid solar photovoltaic installations on individual sites (rooftops) selected by members of the cooperative. These solar installations use “net energy metering,” to generate credits from the existing utility company for excess energy produced by the solar installation to pay dividends to the members and reinvest in future projects. This is a form of what the cooperative calls the “commons model” (People Power Solar Cooperative, n.d.a, n.d.b). This means that members of the collective benefit from rooftop solar even if they do not own a home or have the capital to invest in their own solar installation. This allowed people to join the cooperative and benefit from its programs regardless of their housing status. However, changes in California’s net energy metering program approved by the California Public Utilities Commission in 2023 significantly reduced the benefits of rooftop solar (Foushee, 2023). Prior to this change, the state required private energy utilities to compensate people for their excess electricity generation at the market electricity rate. After the change, compensation rates were reduced by 75 % and people would be required to pay a connection fee to participate in the program.

The change in net energy metering made the cooperative’s rooftop solar model less sustainable, and in part, prompted a shift away from the profit-sharing commons energy model (People Power Solar Cooperative, n.d.a, n.d.b). This highlights one of the challenges in microgrid solar installations—they are often still dependent on the private utility company for infrastructural and administrative capacity, and net energy metering for economic sustainability (see also Ajaz, 2019). But this also presents an opportunity for people to organize around democratizing and re-municipalizing energy infrastructure at larger scales and at policy levels around things like community choice aggregation (Weinrub, 2017).

These engagements with the state and private utility companies highlight the contradiction where community-scale energy democracy projects potentially need to integrate with existing, large-scale power grids to avoid having to build out their own power supply infrastructure on the one hand, and yet state capacity can be leveraged toward anti-racist, environmental justice-oriented projects on the other (see Miyake, 2021). If one of the objectives of the cooperative is to build energy democracy, then perhaps navigating this contradiction is an essential part of the politics oriented around the present to build toward a different, abolitionist vision of the future. However, the question remains whether such engagements with state and corporate power serve to reinforce not only their legitimacy, but also the social relations they congeal, and to what extent such engagements—or disengagements—can build toward self-determination, liberation, and unsettling fossil fuel-turned-green racial capitalism. That is, perhaps this contradiction points to the need for work like that undertaken by the cooperative to break away from reliance on the state and utilities to build out autonomous energy systems.

From the perspective of making abolition democracy, the state is a potentially problematic, yet simultaneously useful array of institutions and capacities. On the one hand, the state provides a framework for regulating and incentivizing (through rebates and tax credits) solar installations.

State capacity can, in theory, be leveraged toward further promoting distributed and community-controlled solar power. On the other hand, the processes through which the state operates are generally not truly democratic in that energy lobbies push lawmakers to concede to policies that allow energy companies to continue maximizing profit from customers without providing them fair compensation. The state also tends to favor large-scale energy solutions, which at least in California, are for-profit initiatives. Abolition democracy calls for, in a Du Boisian sense, perhaps capturing the state and reworking it in radically democratic and non-capitalistic ways—vis-à-vis a "dictatorship of labor over capital" (Du Bois, 1935: 185). But in a pragmatic sense, this might begin to take shape through a combination of education, community capacity building, and creating more community solar initiatives in an effort to transform the way people think about and relate to fossil fuel racial capitalism and energy production.

In their Shared Values and Purpose of the Energy Democracy Project, the cooperative rejects "ownership" in the energy sector and aims to make it a public good (People Power Solar Cooperative, 2021). They also reject extractive capital and the "enclosure of wealth and power" (*Money & Power: The Extractive Economics of Investor Owned Utilities*, 2021). It seems that the cooperative's orientations around, and implementation of energy access, community-led decision-making and self-determination, a non-capitalist production model, and energy democracy indicate that they are largely working outside the state and utility companies while aiming to fundamentally shift people's relationship to racial capitalist energy production. This raises the important question of whether and how distributed and community energy projects can truly disentangle themselves from the stranglehold of large-scale power corporations or the state under the dominant modes of racial capitalist energy production. The cooperative does not directly address this question, however, they are engaging in other forms of mutual aid work that seeks to transform both community relationships to energy and to build stronger communities.

Experiments in mutual aid

People Power Solar Cooperative has developed several mutual aid projects that go beyond rooftop solar to disengage from the state and capital altogether and extend their work beyond their members to include broader Oakland communities. The urgencies and necessities for some form of movement in response to climate change crises open up possibilities for organized struggles to redefine the stakes and positionalities of who constitutes the "we" of abolition democracy (Sandler, 2021), just as Black workers' general strike did for the abolition of slavery (Du Bois, 1935) to "[create] the circumstances of their own freedom" (Heynen, 2021: 99). This highlights, as Matt Sandler points out, "The political difficulty for abolitionists of all kinds is to enlist others in the recognition of its necessity" (2021: 119). In this spirit, the cooperative's mutual aid projects expand the "we" of their work beyond their activist-oriented member base to draw in other people otherwise unaffiliated with the cooperative and to elicit a shared sense of community and mutuality reflective of the types of social relations that make abolition democracy possible.

Among these efforts are different forms of mobile and permanent solar power-sharing projects. This includes a mutual aid-based "emergency battery network" to provide backup power solutions to people experiencing power emergencies. In this program, people, including non-members, volunteer to charge and store backup battery systems in their homes. When someone else needs emergency electricity, say because of rolling blackouts or unaffordable electricity bills,[3] people in the network work together to figure out how to get batteries to the person in need. In addition to actually developing a battery-sharing network, the cooperative has also led training sessions on how to create emergency battery networks for other communities as well. These sessions cover topics from governance and infrastructure to understanding how batteries work and how to set them up. During one of these training sessions, Crystal Huang, a board members of the cooperative,

explained that these battery-sharing networks are about "how we be in community with each other so we can share, so that we, as humans, can start to be in relationship with each other…so we can rely on each other when the system and the infrastructure fails" (*Emergency Battery Co-Lab Training #2: Chapter 2: Where We Come From Activity*, 2023).

Another incubating mutual aid project includes a network for assisting people during fire season —one of the major threats exacerbated by climate change that affects the Oakland Hills and surrounding communities. They are working to develop co-owned "resilience hubs" in collaboration with local churches that include disaster response, microgrids, re-commoning public space, emergency kits in homes, and stewarding community relationships as "the infrastructure for resiliency" (Huang, 2020). There are difficulties in getting these hubs and collaborations running while working with the understanding that their conversations with their community partners need "to be focused on 'co-owning an energy resilient system (identify what they want) at a specific site'" (People Power Solar Cooperative, 2020). This means that they need to do the difficult work of figuring out what types of arrangements work best for their community partners and convincing them of the benefits of collectively owned solar. This is layered "on top of the tricky question around trauma, power, racial politics, there is a lot of healing work to be done before we can start engaging in conversations around collective ownership" (People Power Solar Cooperative, 2020). Thus, they recognize that developing these experiments in mutual aid requires engaging in difficult conversations with their partners and community members to meet community needs in ways that avoid reproducing the harms wrought by religion, white supremacy, racial capitalism, and uneven development.

The cooperative has also partnered with the group Freedge to install a solar-powered refrigerator adjacent to a community garden where people can engage in mutual aid by donating and taking free groceries and produce to help address food insecurity. While this may merely seem like a patch on a systemic problem of food insecurity, the Freedge program is centered around the notion of having the refrigerators be part of the broader work that community organizations engage in like teaching people how to grow and distribute healthy foods (Westervelt, 2020). It is just one way that people are developing a sense of how to connect community energy solutions to addressing the needs of food-insecure populations. Furthermore, it is similar to their broader relationship to energy programs, which they view as being just one component in building economic and political power, as well as understanding and seeking to change the systemic issues underlying fossil fuel racial capitalism (see Huang and National Community Solar Partnership, 2023).

Finally, the cooperative has started brainstorming ways to work with community partners such as Sogorea Te' Land Trust and Movement Generation—who rematriated 43 acres of land in the unceded Bay Miwok territory of the San Francisco East Bay (Ixierda, 2023)—to imagine and develop ways to integrate energy systems on the land (Huang, 2022). While this project has not yet taken shape, such a land-based initiative can be understood as working within an abolition ecologies framework of developing new social relations and "intuitions focused on securing political ecological land rights" (Heynen, 2021: 100; see also Hardy et al., 2022).

These mutual aid and land-based initiatives allow the cooperative to work autonomously from the state and private utilities. They build toward energy self-sufficiency and stronger communities in ways that recognize underlying structural problems and seek to reorient people's relationships to energy, land, and each other. One impulse might be to critique these mutual aid projects as forms of charity that do not address underlying problems. However, drawing on Dean Spade (2020a), mutual aid might instead be understood as "the radical act of caring for each other while working to change the world" (book flap). It is a form of "solidarity not charity" where people "Work to create an alternative infrastructure based on left values of democracy, participation, care, and solidarity includes many of the prior activities, which establish community connections and put in place structures for meeting needs" (Spade, 2020b: 135). Indeed, in all of its undertakings, the cooperative is focused

on materially improving people's lives without reinforcing structures of dominance or the state's capacity for inflicting harm. Toward this end, the cooperative in general focuses on building "'power' in many senses of the word" (People Power Solar Cooperative, 2022: 6) through democratic workforces and good jobs, community financial power, political power, strong communities, and self-governance. Collectively, these are forms of abolitionist and decolonial prefigurations of the types of place-based social relations, intuitions, and institutions that support the making of abolition democracy, abolition ecologies, and abolition geographies.

Radically democratic self-governance

While the cooperative does not employ the language of abolition or abolition democracy in its promotional materials, these serve as apt frameworks because the cooperative is aimed at reducing or eliminating the use of fossil fuels (tearing down) toward the broader goal of energy democracy by working to establish new institutions and infrastructures rooted in justice, mutual aid, and self-determination (building up). Charmaine Chua (2020), citing community organizer Kieran Frazier Knutson, "calls this 'building our autonomous capability,' understanding abolition as an ongoing world-making project that centers the participatory dimensions of community safety" (S-131). The cooperative is experimenting with abolitionist world-making projects that prefiguratively enact the types of social relations and governance models that form the basis for an emergent abolition democracy.

Emphasizing the centrality of governance and self-reliance in making abolition democracy, one of the most prominent features of the cooperative is its participatory and democratic governance model. This model is rooted in non-capitalist modes of production, self-determination, and participatory and democratic forms of self-governance that foreground a "just transition." All members agree to these commitments (People Power Solar Cooperative, 2022). As a cooperative, their "general" membership base of over 160 people from across California primarily consists of people who buy shares in the cooperative. General members' voting power does not depend on how many shares they buy into the cooperative, making everyone equal in that regard. In addition to its general membership, the cooperative also has over forty "anchor members" who are either workers or people appointed by the leadership. The workers are guided by a board of directors that is largely elected, but also consists of several people appointed by affiliated organizations such as the Asian Pacific Environmental Network and Communities for a Better Environment. Directors and workers can be voted out by the member base through fair and measured due process. This model allows the leadership to steer the cooperative toward its underlying vision of social and environmental change while remaining accountable to the member base and broader communities.

Despite the hierarchical structure of the cooperative's leadership, the actual work that the cooperative engages in functions through a radically democratic model of governance. The engines of the organization are decentralized project groups formed by members and not directly under the control of the board, which propose and initiate semi-autonomous projects and direct funds toward that end. These projects include the battery network, land-based energy, and rooftop solar projects mentioned above. The project groups function like cooperatives within the cooperative (People Power Solar Cooperative, 2022). This provides members the opportunity to be directly involved in guiding the direction the cooperative takes beyond a monolithic democracy model and requires members to (voluntarily) invest their time and energy toward those ends. This means that beyond passive participation through voting, members actively invest their time and energy toward the establishment of new projects and institutions within the cooperative.

The cooperative maintains a set of legally binding, "living" bylaws that evolve with the directions taken by the cooperative. These bylaws establish the structure of the cooperative including its

governance, project groups, membership, political commitments, and how to change the bylaws. They are an important part of the cooperative because they reflect the radically democratic principles of shared governance, mutual responsibility, and willingness to adapt to changing internal and external conditions. Furthermore, the actual bylaw document is made accessible to members through the inclusion of illustrations and use of plain language (People Power Solar Cooperative, 2022). They are also summarized in a series of online videos to encourage all members to familiarize themselves with the governance of the cooperative. This emphasizes the perspective that education—both political and technical—is part of the foundation of reworking social relations and facilitating people's involvement in radically democratic processes and transformative politics.

Through its solar-based projects, which are becoming increasingly independent from the dominant centralized power grid, the cooperative works toward a form of community self-reliance. An abolition democracy framework offers the idea that making these types of projects a reality is part of the process of moving toward self-reliance from not only the state and energy utilities, but also non-capitalist social relations, premised on building strong communities. While important to recognize the specificity of Black communities, Ashanté M. Reese (2019) articulates, "the 'self' in self-reliant —when used by Black people—is hardly the individualist perspective imagined by enlightenment thinkers and beyond. Instead, 'self' is already articulated as being enmeshed in community and perhaps this is where the possibilities lie" (139). It is this notion of community and self-reliance that the cooperative engages in the process of developing new institutions, infrastructures, and social relations. Energy democracy and self-determination through cooperative solar projects, then, might be understood as "less an end than a prerequisite for a democratic constitution of the processes and institutions of collective life" (Chua, 2020: S-131). The cooperative is ultimately building community and place in Oakland by carving out abolition geographies that reconfigure urban space in the image of anti-racist, anti-capitalist, communal, and environmentally just social relations (see Gilmore, 2017; Heynen and Ybarra, 2021).

Conclusion

One cannot push for solar growth without considering the occupation of Native lands and the impact on non-human species and environments (Norton-Smith et al., 2016), or the toxic, extractive, and exploitative supply chains that produce solar photovoltaic and battery storage systems (Brock et al., 2021; Mulvaney, 2014). One cannot simply turn to state-led policies without questioning the neoliberal and fascist tendencies dominant within contemporary liberal democratic nation-states. One cannot ignore the ways that the state is structured through white supremacy and environmental extractivism. Furthermore, any transition to "greener" capitalism does not undo the (global) capital/labor relation, the racialized and gendered character of capitalism, or the unsustainable growth motives (and necessity) of capitalist accumulation. Any abolitionist approaches to these conundrums must take these factors into consideration, not to solve everything at once, but to take pains not to further solidify one mode of domination while trying to address another. This is what I mean, building on the work of others (e.g., Beinhocker, 2019; Luke and Heynen, 2020; Ranganathan and Bratman, 2021; Sze, 2021), when I describe an abolitionist perspective on climate change rooted in abolition democracy.

Ultimately, the goal of abolition democracy is not just to reduce carbon emissions (though it is necessary) or to grow a "greener" capitalist economy (it needs to be dismantled). It is to change everything (Gilmore, 2017), across scales (Hamlin, 2023), and from the short-term to long-term horizons. Renewable energy, and especially things like the microgrids and solar mutual aid programs run by the People Power Solar Cooperative barely scratch the surface of eliminating fossil fuel dependency. But they present real opportunities for developing new, abolitionist social

relations that can spread outward and upward. Shifting people's mindsets to make this possible, and demonstrating the possibilities of making abolitionist imaginations concrete is the hard work of making abolition democracy. Abolition democracy offers an ambitious framework for approaching the webs of interrelated processes and infrastructures that shape our climate future. It is about developing tactics, strategies, and praxes as processes of enacting freedom, not as an end goal, but as movement through continual re-articulation of struggles to meet the historically grounded conditions of the present. It is about fighting for radical democracy, for new relationalities, for total liberation, not partial solutions that reinscribe existing systems of dominance.

Making abolition democracy requires asking how to think about the state and governance nationally and internationally, as well as thinking about how the local scales upward and outward (Hamlin, 2023) from the region to the globe since climate change itself is not confined to one scale of impacts. This is a call to think hard about making a place on this planet through ways that operate translocally and across geographical and political scales (Stevis, 2023; Stock, 2023), while recognizing the historical and geographical specificities and traumas of distinct communities and places. Making place means taking seriously the difficult work of reshaping our communities, our households, our relationships, our ideologies, our collective environments, and ourselves in ways that refuse the nihilism, ambivalence, and fatalism of fossil fuel racial capital's climate catastrophes. This takes and makes place through both small- and large-scale projects that necessarily proliferate across multiple geographies and configurations of space. For example, energy cooperatives have developed throughout Europe since the 1970s, foregrounding communal ownership and ways to destabilize energy monopolies by large-scale utilities, owing in part to deregulated governance regimes (Benander et al., 2017). This includes intra-European Union collaborative resource-sharing cooperatives, and even a 45,000-member strong energy cooperative in Belgium with a diversified energy portfolio, which has even developed relationships with local municipalities (Benander et al., 2017). While these cooperatives are not necessarily rooted in abolition democracy, they certainly demonstrate some ways that people are beginning to shift the social relations of fossil fuel racial capitalism. Expanding the aims of these types of cooperatives to take on the legacies of, for example, European colonialism, uneven development, and racial capitalism would expand the possibilities of making abolition democracy.

In a certain sense, this is nothing new to many forms of climate justice, ecosocialist, ecofeminist, anarchist, Black Radical, Indigenous, and Third World thought. Building on these frameworks, combined with the urgency of climate change responses, shows, as Sandler (2021) argues, that

> abolition is a necessity. It is not something that we might do, could do, or should do. It is not ultimately a matter of political capability or morality. It is something about which there is no choice. To think in terms of choice is to delay its inevitability. Abolition is necessary in perpetuity, as long as we live in a society which takes freedom as a core value. (118)

Therefore, it is vital that we begin to imagine what abolitionist steps toward environmentally just futures might look like, particularly in terms of short-term praxis with long-term sights. It is about keeping an eye on what types of radically democratic institutions we can carve out in any fight for both transitional and transformational politics. It is about finding the connections between seemingly disparate struggles that are, often in insidious and deadly ways, connected through common threads of the broad impacts and drivers of climate change (Sze, 2021), and developing syncretic politics and praxis appropriate to that challenge (Gilmore, 2008; Mei-Singh, 2021).

The stakes are not just about a "green" or ecological transition, they are more aptly framed around the expansive concepts of the human and more-than-human, and all the relations that embodies. This is an abolition not rooted in the elimination of just prisons, slavery, or fossil fuels, but one grounded in the theory and praxis of changing and remaking and repairing everything (Gilmore, 2017), starting

with the development of radically democratic institutions and infrastructures. Perhaps we might heed Lester's call "for abolition as itself not a goal, a map, or an ideal but as a problematic, a way of theorizing as deep and expansive as any democratic theory" (2021: 3086). It is, as Davis (2011b) argues with regard to prison abolition, to "imagine a constellation of alternative strategies and institutions, with the ultimate aim of removing the prison from the social and ideological landscapes of our society…to envision a continuum of alternatives…based on reparation and reconciliation" (107). Abolitionist thinking offers a perpetually emergent future that requires constant and unending struggle, *and* a practical guide for action. This guide to action holds in it the possibilities for short-term "abolitionist reforms" (Gordon qtd. in Gilmore and Gilmore, 2008; see also Carroll, 2019) as the means, not as ends unto themselves, but concrete actions that gesture toward and in service of a broader, ever-evolving abolitionist horizon. In Du Bois's (2007) words, this means to "live and eat and strive, and still hold unfaltering commerce with the stars" (3).

Highlights

- The world needs novel solutions to address climate change in just ways for all our liberation.
- Abolition democracy provides a critical framework for understanding climate change and the elimination of fossil fuels.
- The project of abolitionist energy democracy is provided as an example of a place where abolition democracy might take hold.

Declaration of conflicting interests

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author received no financial support for the research, authorship, and/or publication of this article.

ORCID iD

Keith K. Miyake https://orcid.org/0000-0002-4129-5656

Notes

1. The "crisis" of climate change is perhaps better understood as a prolonged disaster, both in terms of the lengthy histories of environmental change and settler colonialism, as well as the uneven development that positions marginalized and surplus populations as the most vulnerable to the ravages of environmentally racist climate change impacts (see Hardy et al., 2022; Whyte, 2017).
2. Technofixes are (often liberal) attempts to use technological innovations to fix social and environmental problems, generally in ways that fail to fully consider underlying structures of dominance.
3. The private utility for Oakland, Pacific Gas and Electric, is the most expensive electricity provider in California (Van Derbeken, 2024).

References

Abolition Collective (2020) Introduction. In: *Making Abolitionist Worlds: Proposals for a World on Fire*. Brooklyn and Philadelphia: Common Notions, 1–6.

Ajaz W (2019) Resilience, environmental concern, or energy democracy? A panel data analysis of microgrid adoption in the United States. *Energy Research & Social Science* 49: 26–35.

Behles D, Sutterman A, Raval A, et al. (2020) *Building a just energy future: A framework for community choice aggregators to power equity and democracy in California*. The California Environmental Justice Alliance. Available at: https://caleja.org/wp-content/uploads/2020/11/CEJA-CCA-REPORT-SINGLE-PAGE.pdf (accessed 1 March 2024).

Beinhocker E (2019) I am a carbon abolitionist. Available at: https://democracyjournal.org/arguments/i-am-a-carbon-abolitionist/ (accessed 24 July 2023).

Benander L, Horowitz DA and Baker I (2017) New economy energy cooperatives bring power to the people. In: Fairchild D and Weinrub A (eds) *Energy Democracy: Advancing Equity in Clean Energy Solutions*. Washington, Covelo: Island Press, 195–217.

Brock A, Sovacool BK and Hook A (2021) Volatile photovoltaics: Green industrialization, sacrifice zones, and the political ecology of solar energy in Germany. *Annals of the American Association of Geographers* 111(6): 1756–1778.

Burke MJ and Stephens JC (2018) Political power and renewable energy futures: A critical review. *Energy Research & Social Science* 35: 78–93.

Camp JT and Heatherton C (2016) *Policing the Planet: Why the Policing Crisis Led to Black Lives Matter*. London and Brooklyn: Verso Books.

Carroll WK (2019) Fossil capitalism, climate capitalism, energy democracy: the struggle for hegemony in an era of climate crisis. *Socialist Studies/Études Socialistes* 14(1): 1–26.

Chua C (2020) Abolition is A constant struggle: Five lessons from Minneapolis. *Theory & Event* 23(4S): S-127–S-147.

City of Oakland (2020) Oakland 2030 equitable climate action plan (ECAP). Available at: https://www.oaklandca.gov/projects/2030ecap (accessed 25 June 2024).

Davis AY (2011a) *Abolition Democracy: Beyond Empire, Prisons, and Torture*. New York: Seven Stories Press.

Davis AY (2011b) *Are Prisons Obsolete?* New York: Seven Stories Press.

Droubi S, Heffron RJ and McCauley D (2022) A critical review of energy democracy: A failure to deliver justice? *Energy Research & Social Science* 86: Article 102444.

Du Bois WEB (1935) *Black Reconstruction in America: An Essay Toward the History of the Part Which Black Folk Played in the Attempt to Reconstruct Democracy in America, 1860–1880*. New York: Harcourt, Brace and Company.

Du Bois WEB (2007) *Dusk of Dawn*. Oxford and New York: Oxford University Press.

Emergency Battery Co-Lab Training #2: Chapter 2: Where We Come From Activity (2023). Available at: https://www.youtube.com/watch?v=REDrnnQAG3U (accessed 30 June 2024).

Fairchild D (2017) Conclusion: Building an energy democracy movement. In: Fairchild D and Weinrub A (eds) *Energy Democracy: Advancing Equity in Clean Energy Solution*. Washington, DC: Island Press, 239–249.

Fairchild D and Weinrub A (eds) (2017) *Energy Democracy: Advancing Equity in Clean Energy Solution*. Washington, DC: Island Press.

Foushee F (2023) Net metering changes in California: How will they impact you? Available at: https://www.cnet.com/home/energy-and-utilities/net-metering-changes-in-california-how-will-they-impact-you/ (accessed 11 March 2024).

Garzón C, Cooley H, Heberger M, et al. (2012) *Community-based climate adaptation planning: Case study of Oakland, California*. CEC-500-2012-XXX. California Energy Commission.

Gill N (2020) Border abolition and how to achieve it. In: Cooper D, Dhawan N and Newman J (eds) *Reimagining the State: Theoretical Challenges and Transformative Possibilities*. Abingdon and New York: Routledge, 231–250.

Gilmore RW (2008) Forgotten places and the seeds of grassroots planning. In: Hale CR (eds) *Engaging Contradictions: Theory, Practice, and Methods of Activist Scholarship*. Berkeley and Los Angeles: University of California Press, 31–61.

Gilmore RW (2017) Abolition geography and the problem of innocence. In: Johnson GT and Lubin A (eds) *Futures of Black Radicalism*. London and New York: Verso, 225–240.

Gilmore RW (2023) Ruth Wilson Gilmore—“Where life is precious, life is precious.” Available at: https://onbeing.org/programs/ruth-wilson-gilmore-where-life-is-precious-life-is-precious/ (accessed 26 April 2023).

Gilmore RW and Gilmore C (2008) Restating the obvious. In: Sorkin M (eds) *Indefensible Space: The Architecture of the National Insecurity State*. New York and London: Routledge, 141–161.

Gonzalez C (2020) Racial capitalism, climate justice, and climate displacement. *Climate Justice in the Anthropocene* 11(1): 108–147.

Hall S (1980) Race, articulation, and societies structured in dominance. In: O’Callaghan M (eds) *Sociological Theories: Race & Colonialism*. Paris: UNESCO, 305–345.

Hamlin M (2023) Geography’s abolitionist turn: Notes on freedom, property, and the state. *Progress in Human Geography* 47(6): 755–768.

Hardy D, Bailey M and Heynen N (2022) “We’re still here”: An abolition ecology blockade of double dispossession of Gullah/Geechee land. *Annals of the American Association of Geographers* 112(3): 867–876.

Heynen N (2016a) Toward an Abolition Ecology. *Abolition Journal*. Available at: https://abolitionjournal.org/toward-an-abolition-ecology/ (accessed 23 November 2017).

Heynen N (2016b) Urban political ecology II: The abolitionist century. *Progress in Human Geography* 40(6): 839–845.

Heynen N (2021) “A plantation can be a commons”: Re-Earthing Sapelo Island through abolition ecology: The 2018 Neil Smith Lecture. *Antipode* 53(1): 95–114.

Heynen N and Ybarra M (2021) On abolition ecologies and making “freedom as a place”. *Antipode* 53: 21–35.

Huang C (2020) Resilience Hub at The Church by the side of the road!?! Available at: https://peoplepowersolar.mn.co/posts/4907166 (accessed 15 March 2024).

Huang C (2022) New to the people power playground? Start here! Available at: https://peoplepowersolar.mn.co/posts/3475149 (accessed 11 March 2024).

Ixierda I (2023) Indigenous land return announcement by Sogorea Te’ land trust and movement generation! In: *The Sogorea Te Land Trust*. Available at: https://sogoreate-landtrust.org/2023/06/21/social-justice-organizations-return-43-acres-of-land-to-black-and-indigenous-stewardship-in-sf-bay-area/ (accessed 11 March 2024).

Kushner R (2019) Is prison necessary? Ruth Wilson Gilmore might change your mind. *The New York Times*, 17 April. Available at: https://www.nytimes.com/2019/04/17/magazine/prison-abolition-ruth-wilson-gilmore.html (accessed 17 April 2019).

Lester Q (2021) Whose democracy in which state?: Abolition democracy from Angela Davis to W. E. B. Du bois. *Social Science Quarterly* 102(7): 3081–3086.

Lipsitz G (2004) Abolition democracy and global justice. *Comparative American Studies An International Journal* 2(3): 271–286.

Luke N and Heynen N (2020) Community solar as energy reparations: Abolishing petro-racial capitalism in New Orleans. *American Quarterly* 72(3): 603–625.

Mann G (2013) Who’s afraid of democracy? *Capitalism Nature Socialism* 24(1): 42–48.

Mei-Singh L (2021) Accompaniment through carceral geographies: Abolitionist research partnerships with indigenous communities. *Antipode* 53(1): 74–94.

Mei-Singh L (2022) War or survival: Where do we go from the end of the world? In: *Society and Space*. Available at: https://www.societyandspace.org/articles/war-or-survival-where-do-we-go-from-the-end-of-the-world (accessed 18 March 2024).

Melamed J (2015) Racial capitalism. *Critical Ethnic Studies* 1(1): 76–85.

Miyake K (2021) The racial environmental state and abolition geography in California’s central valley. *Environment and Planning D: Society and Space* 39(4): 590–608.

Miyake KK (2023) Carceral jaguar geographies along the US/México border and the case for border abolition. *Local Environment* 28(10): 1295–1310.

Money & Power: The Extractive Economics of Investor Owned Utilities (2021). Available at: https://www.youtube.com/watch?v=85DXMd52Qc8 (accessed 3 April 2024).

Mulvaney D (2014) Are green jobs just jobs? Cadmium narratives in the life cycle of photovoltaics. *Geoforum; Journal of Physical, Human, and Regional Geosciences* 54: 178–186.

Huang C and National Community Solar Partnership (2023) National community solar partnership: Building with benefits: Community ownership. Slide presentation. Available at: https://www.energy.gov/sites/default/files/2023-08/Presentation%20-%20Building%20with%20Benefits%20-%20Community%20Ownership%2007-25-23.pdf (accessed 30 June 2024).

Norton-Smith K, Lynn K, Chief K, et al. (2016) *Climate change and indigenous peoples: a synthesis of current impacts and experiences*. PNW-GTR-944. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. Available at: https://www.fs.usda.gov/treesearch/pubs/53156 (accessed 19 May 2023).

Oakland Climate Action Coalition (n.d.) Oakland climate action coalition | Creating a more sustainable and just city. Available at: https://oaklandclimateaction.org/ (accessed 25 June 2024).

Pellow DN (2018) *What Is Critical Environmental Justice?* Cambridge and Medford: Polity Press.

People Power Solar Cooperative (2020) Running notes for conversation around resilience hub w/ church by the side of the road. Available at: https://docs.google.com/document/u/0/d/11qOzM6yah_hBNsO5H4vgeL8kjx6EiQKF29yBJCGqHTg (accessed 15 March 2024).

People Power Solar Cooperative (2021) Shared values and purpose of the energy democracy project.

People Power Solar Cooperative (2022) Bylaws of people power solar cooperative, Inc. Available at: https://drive.google.com/file/d/11qXiDId2_5RCT3ARovqhSTJnIH55q3um/view.

People Power Solar Cooperative (n.d.a) About. Available at: https://www.peoplepowersolar.org/about (accessed 12 March 2024).

People Power Solar Cooperative (n.d.b) Projects. Available at: https://www.peoplepowersolar.org/projects (accessed 11 March 2024).

Petitjean C (2018) Prisons and class warfare: An interview with Ruth Wilson Gilmore. In: *Verso*. Available at: https://www.versobooks.com/blogs/news/3954-prisons-and-class-warfare-an-interview-with-ruth-wilson-gilmore (accessed 19 March 2024).

Pulido L (2016) Geographies of race and ethnicity II: Environmental racism, racial capitalism and state-sanctioned violence. *Progress in Human Geography* 41(4): 524–533.

Ranganathan M and Bratman E (2021) From urban resilience to abolitionist climate justice in Washington, DC. *Antipode* 53(1): 115–137.

Reese AM (2019) *Black Food Geographies: Race, Self-Reliance, and Food Access in Washington, D.C*. Chapel Hill: University of North Carolina Press.

Robinson CJ (2000) *Black Marxism: The Making of the Black Radical Tradition*. Chapel Hill: University of North Carolina Press.

Rodríguez D (2021) *White Reconstruction: Domestic Warfare and the Logics of Genocide*. New York: Fordham University Press.

Sandler M (2021) The necessity of abolition. *Soundings* 78(78): 109–123.

Spade D (2020a) *Mutual Aid: Building Solidarity During This Crisis (and the Next)*. London and New York: Verso.

Spade D (2020b) Solidarity not charity. *Social Text* 38(1): 131–151.

Steinberg T (2010) Can capitalism save the planet?: On the origins of green liberalism. *Radical History Review* 2010(107): 7–24.

Stevis D (2023) *Just Transitions: Promise and Contestation*. Cambridge, New York, Melbourne, New Delhi, and Singapore: Cambridge University Press.

Stock R (2021) *Deus ex Mitigata*: Denaturalizing the discursive power of solar India. *Environment and Planning E: Nature and Space* 4(2): 354–382.

Stock R (2023) Abolition solarities: Theorizing antiracist and Anticapitalist solar energy insurrections. *Renewable and Sustainable Energy Transition* 4: 100063.

Sze J (2021) Abolitionist climate justice, or ICE will melt. *American Studies* 60(3–4): 43–62.

Szulecki K and Overland I (2020) Energy democracy as a process, an outcome and a goal: A conceptual review. *Energy Research & Social Science* 69: 101768.

Tobias MN, Miller C, Jaber D, et al. (2020) *Racial Equity Impact Assessment & Implementation Guide*. Oakland: City of Oakland.

Van Derbeken J (2024) PG&E becomes California's most expensive power provider. *NBC Los Angeles*. Available at: https://www.nbclosangeles.com/investigations/national-investigations/pge-rate-hike-california/3302833/ (accessed 2 July 2024).

Vergès F (2017) Racial Capitalocene. In: Johnson GT and Lubin A (eds) *Futures of Black Radicalism*. London and Brooklyn: Verso, 72–82.

Wahlund M and Palm J (2022) The role of energy democracy and energy citizenship for participatory energy transitions: A comprehensive review. *Energy Research & Social Science* 87: 102482.

Weinrub A (2009) Oakland coalition charts new course on climate strategy. *Race, Poverty & the Environment* Fall 2009: 28–31.

Weinrub A (2017) Democratizing municipal-scale power. In: Fairchild D and Weinrub A (eds) *Energy Democracy*. Washington, DC: Island Press/Center for Resource Economics, 139–171.

Welton S (2018) Grasping for energy democracy. *Michigan Law Review* 116.4: 581.

Westervelt E (2020) Freedge movement: Grassroots efforts fight food insecurity with free refrigerators. *NPR*, 29 September. Available at: https://www.npr.org/2020/09/29/917023702/freedge-movement-grassroots-efforts-fight-food-insecurity-with-free-refrigerator (accessed 30 June 2024).

Whyte K (2017) Our ancestors' dystopia now: Indigenous conservation and the Anthropocene. In: Heise UK, Christensen J and Niemann M (eds) *Routledge Companion to the Environmental Humanities*. London and New York: Routledge, 206–215.

Whyte K (2020) Too late for indigenous climate justice: Ecological and relational tipping points. *WIREs Climate Change* 11(1): 1–7.

Yusoff K (2018) *A Billion Black Anthropocenes or None*. Minneapolis and London: University of Minnesota Press.