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Title

Struggles for Environmental Justice in US Prisons and Jails

Permalink

https://escholarship.org/uc/item/4zd2n7c3

Journal

Antipode, 53(1)

ISSN

0066-4812

Author

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Publication Date

2021

DOI

10.1111/anti.12569

Peer reviewed

Struggles for Environmental Justice in US Prisons and Jails

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Abstract: In this paper I ask how might environmental justice studies scholarship be recast if we consider the phenomenon of environmental injustice as a form of criminalisation? In other words, since environmental injustice is frequently a product of state-sanctioned violence against communities of colour, then what are the implications of reframing it as a practice of treating those populations as criminally suspect and as deserving of state punishment? Moreover, how are the targets and survivors of environmental injustice/racism enlisted in generative ways that resist that criminalisation and support abolition? I answer these questions through a consideration of how struggles inside and outside of carceral spaces represent urgent and timely opportunities to rethink the possibilities of environmental justice theory and politics by linking them to practices and visions of abolition ecology and critical environmental justice.

Keywords: racism, prisons, critical environmental justice, criminalisation, abolition ecology

Introduction

Bryant Arroyo is a Puerto Rican man who served time at a prison in Pennsylvania and organised 900 of his fellow inmates to write letters to the nearby town supervisors protesting the planned construction of an \$800 million coal gasification plant next door. The coal plant proposal was defeated, earning Arroyo the title of "jail house environmentalist". Arroyo is just one of many persons in the US who has fought against environmental injustices under conditions of considerable brutality and repression of the criminal legal system. In this paper I explore a number of intersections between environmental justice (EJ) concerns, incarceration, and criminalisation to make sense of the conditions faced by the millions of people locked up in the US.

The United States of America has the largest prison system of any nation on earth, the largest number of prisoners of any country, and one of the highest percentages of imprisoned persons of any nation (Walmsley 2015). As of this writing there are more than two million people incarcerated in federal and state prisons, jails, immigration prisons and other "correctional" facilities in the United States; if all of those prisoners were housed in one location, it would constitute the fourth largest city in the nation (City Data 2016). Anthropologist Lorna Rhodes (2001) refers to the prison system as a "second country". While scholars have established that prisons and imprisonment show few signs of abatement in the US and are sites of racialised and gendered violence (Mogul et al. 2011), an emergent area

of research reveals that the prison system is also a space where incarcerated persons and their allies struggle for environmental justice (Perdue 2018). These struggles emerge from the revelation that prisons and jails in the US are institutions where people of colour are overrepresented and are frequently built adjacent to or even on top of toxic waste sites, are inundated with air and/or water contamination, and are sources of hazardous waste generation.

Accordingly, I ask how might environmental justice studies scholarship be recast if we consider the phenomenon of environmental injustice as a form of criminalisation? In other words, since environmental injustice is frequently a process and product of state-sanctioned violence against communities of colour, then what are the implications of reframing it as a practice of treating those populations as inherently criminal and deserving of state punishment? Moreover, how are the targets and survivors of environmental injustice/racism enlisted in generative ways that resist criminalisation and support abolition? I answer these questions through a consideration of how struggles inside and outside of carceral spaces represent urgent and timely opportunities to rethink the possibilities of environmental justice and abolitionist theory and politics.

Environmental Racism and Environmental Justice Studies

Scholars have documented the fact that people of colour, immigrants, indigenous peoples, low-income persons, women and queer folk across the US and the globe who already experience social, political, economic, and cultural marginalisation are also more likely to experience disproportionate environmental and public health threats from state and corporate institutions than other populations (Bullard 2000; Bullard et al. 2007; Cole and Foster 2000; Dillon and Sze 2016; Gaard 2017; Harrison 2011; Holifield et al. 2010; Stein 2004). Environmental injustices occur when people are disproportionately exposed to health risks in their homes, their neighbourhoods, workplaces, schools, and other spaces, as a result of state policies and industrial practices that support polluting and/or extractive activities that threaten air, land, water, climate, and human and nonhuman communities (García-López 2018). More broadly, environmental injustices reveal how deeply ingrained racism, colonisation, heteropatriarchy, and other systems of oppression are woven into the historical and contemporary structures of society. That is, a focus on environmental injustice primarily through a distributional lens runs the risk of missing entirely the myriad forms of racial hegemony that have historically tended to operate through and rely upon the simultaneous degradation of human communities and ecosystems. In other words, the distributional paradigm tends to focus on the symptoms of environmental injustice while overlooking its underlying driving forces, for example, the ideological and cultural work that defines certain populations and ecosystems as pollutable—or "wastelanding" (Voyles 2015). Such an approach forces us to look for deeper roots and linkages to explain environmental injustices. For example, if racial capitalism (Robinson 2000) is a concept that signals the inseparability of race from capitalism, then "racial ecologies" remind us that the idea of race is inseparable

from our understandings of ecology, and vice versa (Nishime and Hester Williams 2018). Thus racial capitalism is a system that is environmentally unjust because it requires deep and expanding inequalities rooted in the continuous extraction of energy from marginalised humans and from nonhumans and ecosystems. Similarly, I would contend that nation-states enable environmental injustices as a matter of course, through the production of social difference and hierarchy within and across human subjects and between human and nonhuman subjects. Environmental racism, injustice, and inequalities are therefore not new phenomena; as Kyle Powys Whyte writes, the centuries-old reality of "settler colonialism is an environmental injustice ... [because] the US settlement process aims directly at undermining the ecological conditions required for indigenous peoples to exercise their cultures, economies, and political self-determination" (Whyte 2017:165, emphasis added). Grassroots movements for environmental justice have sought to confront these injustices by envisioning and fighting for ecologically regenerative, healthy, and equitable communities, food systems, and economies across multiple scales. Examples of such action include public protests and lawsuits against offending facilities, issuing demands for community recognition and participatory justice via greater inclusion in government decision-making, and supporting community-based, decolonising alternatives to dominant systems of knowledge production, land stewardship, and health promotion (Hoover 2017; Malin 2015; Pulido 2016; Schlosberg 2007).

Recently, scholars have proposed "critical environmental justice" as an emergent framework that seeks to push beyond some of the limitations of earlier generations of EJ Studies through the following four approaches: (1) greater attention to how multiple social categories of difference are entangled in the production of environmental injustice, from race, gender, sexuality, ability, and class to species, which would attend to the ways that both the human and the more-than-human world are impacted by and respond to environmental injustice and related forms of state-corporate violence; (2) an embrace of multiscalar methodological and theoretical approaches to studying EJ issues in order to better comprehend the complex spatial and temporal causes, consequences, and possible resolutions of EJ struggles; (3) a deeper grasp of the entrenched and embedded character of social inequality—reinforced by the power of the state—in society and therefore a reckoning with the need for transformative (rather than primarily reformist) approaches to realise environmental justice; and (4) an intensified focus on the ways that humans and more-than-human actors are indispensable to the present and for building socially just, and ecologically regenerative futures. As EJ Studies has been characterised by limitations at promoting a transformative vision of change, indispensability is a key ingredient in that effort. In other words, Critical EJ Studies aims to advance our analyses and actions beyond the state-centric, capital-restricted, strictly human frameworks typical of much of EJ Studies via a broad anti-authoritarian perspective (Pellow 2016, 2017).

The concept of indispensability as an ethical orientation toward environmental justice politics and theory links nicely with Bledsoe's (2017:47) use of the term marronage, which he frames as a "fundamental commitment to valuing all life, including that of populations deemed non-existent". Historically, maroons were

communities of rebels who opposed enslavement and practiced "freedom on their own terms within a demarcated social space that allows for the enactment of subversive speech acts, gestures, and social practices" (Roberts 2015:5). Thus, in this context, marronage is used to denote spaces and practices of resistance against environmental injustice among peoples targeted for violent exclusion and domination within racial capitalism (Ybarra and Heynen this issue).

Prisons, Abolition Ecologies, and Critical Environmental Justice

Since racial capitalism, settler colonialism, and the US prison system are inherently rooted in constructing, maintaining, and deepening brutal hierarchies (within the human species and between humans and the more-than-human world), a critical environmental justice perspective on these systems of power contends that they are beyond reform and salvage. I therefore argue that, since racist criminalisation is the foundation of the US prison system and environmental racism/injustice is a form of criminalisation, then one means of practicing radical environmental justice politics would include an embrace of abolition. Thus, I argue that a generative means toward abolition might include the pursuit of a critical environmental justice politics that confronts all forms of dominance.

Numerous scholars and activists have thought deeply about the idea of abolition in the context of prisons. Leading antiprison scholar-activist Ruth Wilson Gilmore (2014:vii–viii) writes:

The purpose of abolition is to expose and defeat all the relationships and policies that make the United States the world's top cop, warmonger, and jailer ... abolition is a movement to end systemic violence, including the interpersonal vulnerabilities and displacements that keep the system going. In other words, the goal is to change how we interact with each other and the planet by putting people before profits, welfare before warfare, and life over death.

Angela Davis concurs with Gilmore and contends that prison abolition is not a vision focused on simply removing prisons from society, but instead is predicated on undertaking the more difficult work of making prisons irrelevant and obsolete by transforming the social relationships outside of prisons throughout society that feed and fuel the prison system. As she writes: " ... rather than try to imagine one single alternative to the existing system of incarceration, we might envision an array of alternatives that will require radical transformations of many aspects of our society" (Davis 2003:108). Davis centres her vision and analysis partly in the writings of W.E.B. DuBois (2013), who coined the term "abolition democracy" to describe the kind of society that would be required to truly embrace the freedom of newly emancipated African Americans, since Reconstruction and the subsequent historical periods failed to do so. Such a society would require the abolition of white supremacy itself in order to realise the full promise of democracy and racial justice. Thus abolition democracy in Davis's framework would be immensely beneficial to the abolition of the prison system because it would involve "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" (Davis 2005:96; see also Escobar 2016; James 2005, 2007; Lee 2008; Richie 2012).

But the concept and vision of abolition democracy lacks an explicitly socio-ecological dimension, and that gap offers scholars an opportunity to expand and deepen DuBois's and Davis's frameworks. Nik Heynen (2016) has taken up that challenge by proposing the concept of abolition ecology, which offers a productive foundation on which we can build additional ideas and actions around visions of abolition democracy and other radical change practices. My reading of abolition ecology is that it is premised on the following arguments: if we seek environmental justice, we must work to build and maintain radical democracy; if we seek radical democracy, then we must work to confront major systems of domination, with particular attention to the histories, legacies, and continuing practices of plantation logics, settler colonialism, enslavement, and conquest associated with racial capitalism and the ways in which unequal land and property relations produce violent and uneven geographies. Abolition ecology as a framework presents scholars with the possibility of making generative connections among the range of forces perpetrating harms against various marginalised communities as well as a spectrum of allies in the struggle to address these challenges.

Abolition ecology is an extremely useful framework for moving our analyses of environmental justice politics forward. I propose to link abolition ecology with a critical environmental justice framework (Pellow 2016, 2017) to amplify the tools we can leverage to address these challenges. For example, while there is strong overlap between these two approaches around anti-racist and anti-capitalist politics, critical environmental justice articulates an orientation that is explicitly focused on anarchism (or anti-statism), and strongly supports an ethic of indispensability, or an opposition to what I call the logic of expendability. Anarchism and indispensability work together quite well in that anarchist geographers have long been concerned with dismantling unequal power relations and all forms of exploitation in order to reorganise communities along cooperative, egalitarian lines (Springer 2016). Drawing on these ideas in combination suggests that abolitionist ecology work might have greater transformative potential if we confront relations of dominance whenever and wherever we find them, both within and across the human/nonhuman species boundary. I also contend that such a vision includes a rejection of a reliance on the state. That is where we might come to grapple with the need not only to address state violence but the problem of the violence of states—that is, states are violent constitutions in and of themselves and therefore are unlikely to be sites of resolution where racialised populations and vulnerable more-than-human species, communities, and places are concerned (Aikau 2015; Hong 2006; Pulido et al. 2016; Smith 2011). I think of the state not as a thing but as a series of social relations. Thus, in this view, abolition and anarchism are not about abolishing the state so much as they are about building social relations that are sustainable, healthy, and just, and that meet needs that states cannot or will not fully provide—like real security, peace, socially just relationships, and ecological health. So when I argue that we might look, think, dream, and act beyond the state, I mean we go beyond the state to find other

sources of such support that deepen and improve the health of our relationships among one another and with our ecological life support systems.

While abolition ecology and critical environmental justice are key tools for exploring the structural foundations underlying environmental racism and for devising methods of confronting that phenomenon, I argue that *criminalisation* is an implied yet underdeveloped component of both these frameworks. That is, if environmental injustice/racism is a process and outcome of racial capitalism, one of the cultural logics that fuels it is the criminalisation of marginalised communities. This occurs through the complex webs that constitute the prison industrial complex, but for the purposes of this paper, I focus on the ways that incarceration and environmental harm intersect to deepen that criminalisation and state violence against racialised subjects.

In the rest of this paper, I demonstrate the ways in which environmental injustice functions as a form of criminalisation through an examination of how prisons and environmental concerns intersect in vulnerable communities, and I consider forms of resistance that might reflect and shape abolitionist practice. Environmental injustice harms incarcerated persons as well as their families, future incarcerated persons, and more-than-human communities, and ecosystems within, around, and beyond the prisons walls. This occurs through both exposures to environmental threats and through the larger carceral logics that shape many social institutions in this nation (e.g. housing, education, health care, etc.) that intersect with the prison system and structure domination, constrain behaviours and freedoms, and that intensely criminalise certain populations (Loyd et al. 2012). This means that, expanding upon traditional environmental justice studies approaches that tend to frame harmful environmental exposure in one-dimensional terms, prisons represent a way of understanding how particular bodies and communities can suffer the brutality of environmental racism as criminalisation from birth through death, from living in toxic homes and residential communities that are also occupied by police forces (Alexander 2012; Bullard and Wright 2012; Pellow 2016), to attending schools that are inundated with toxics (Grineski and Collins 2018)² and occupied by police (Meiners 2007; Nolan 2011), to employment in toxic industries where workers are also routinely surveilled and disciplined (Hurley 1995; Park and Pellow 2011; Pellow and Park 2002), to incarceration in toxic prisons where criminalisation and surveillance come with the territory (Pellow 2017). These multiple spaces, sites, and vectors of environmental racism and criminalisation might suggest a revised EJ definition of "the environment" to include those spaces where we live, work, learn, pray, play, and do time. This perspective reflects Katherine McKittrick's (2011:956) concept of "prison life", which points to "the everyday workings of incarceration as they are necessarily lived and experienced, as a form of human life and struggle, inside and outside prisons". I also seek to ensure that my focus on the body is also linked to the broader community of people and beings of which they are apart; hence my use of the twin emphasis on both bodies and communities, so as to avoid a framing of racial violence that replicates a biological narrative (McKittrick 2016:954). This framework is also significant because it contends that prison abolitionist practice is most

effective if we work toward the abolition of dominance in all spaces and institutions across society. If environmental racism/injustice is a form of criminalisation, and criminalisation and racism are the bedrock of the prison system, then one pathway toward radical environmental justice politics would oppose the prison industrial complex and embrace abolition. Similarly, one productive pathway toward abolition might be the pursuit of a radical environmental justice politics that confronts all forms of dominance. These frameworks converge productively in sites and spaces of imprisonment and anti-prison activism because these are terrains where the brutality of environmental racism, enslavement, and criminalisation cohere and are amplified in ways that allow for a focus like none other.

Prisons as Spaces of Struggles For Environmental Justice and Against Criminality

Environmental justice scholars continue to explore new terrains of environmental justice struggle, and in this section, I consider the prison as one site that is now receiving some attention. The materials presented here reflect my contention that environmental racism is a form of criminalisation with often catastrophic consequences, and that also offers a window into how imprisoned persons practice marronage and abolition in the service of a radical environmental justice. Rather than present a single case study, I explore several sites of environmental justice politics in and around prisons to give a sense of the range and breadth of the phenomenon of environmental racism as criminalisation.

The prison is a space of environmental racism and ecological injustice because so many of these facilities in the US are sites where we find threats to human and more-than-human health. Water contamination, hazardous industrial wastes, airborne toxins, and excessive heat are environmental risks that are rampant inside US prisons, thus revealing how more-than-human ecological agents impact the health of incarcerated populations as well as communities outside of prisons, since those threats often migrate beyond the prison walls (Dannenberg 2007).

In the late 1990s and early 2000s, EJ and anti-prison activists led important campaigns that highlighted troubling intersections between environmental injustice and incarceration. This included groups like Mothers of East LA, Critical Resistance, and the Silicon Valley Toxics Coalition. For example, in June 2000, Critical Resistance filed an environmental lawsuit (Critical Resistance et al. v. the California Department of Corrections) to challenge the state of California's proposal to build a prison in the town of Delano (Braz and Gilmore 2006). The lawsuit was part of a campaign that fused anti-prison and environmental justice organising and aims, taking the novel approach of highlighting the combined environmental and social impacts of the proposed prison (Miyake 2018). And while that prison was ultimately built, despite the resistance movement, activists' predictions of environmental and public health risks were accurate and even underestimated the disaster that has since unfolded at that prison, with arsenic contaminated water impacting prisoner health (Martin 2004). That battle reflected what I view as a widespread practice of perpetrating environmental injustices in ways that reinforce the criminalisation of marginalised populations, both among the imprisoned

populations and within those communities whose landscapes are turned into carceral geographies.

Prisons across the US are also sites of hazardous electronic waste recycling, where companies can reduce costs by paying incarcerated workers far less and offering few if any health protections to do this work, which has proven extremely dangerous to inmates (Nowakowski 2016). Environmental groups like the Silicon Valley Toxics Coalition and the Computer TakeBack Campaign exposed these problems early on in several cases where e-waste that was previously migrating across international borders to China was rerouted to prisons in the US, resulting in documented increases in health risks to inmates (Smith et al. 2006).

Today, groups like the Prison Ecology Project and the Campaign to Fight Toxic Prisons are joining the movement—as a coalition of allied activists and incarcerated persons—and they have found many more causes for concern, including cases of water contaminated with lead and arsenic in jails and prisons, facilities located in flood zones and near or on top of superfund sites and other hazardous waste dumps. At prisons housing adults, youth, immigrants, persons with disabilities, and people of all genders, reports of valley fever, Legionnaires' disease, inadequate health care, poor quality food, and rat, insect, and mould infestation, and sewage system malfunctions are widespread and routine (Tsolkas 2016). Prisoners are also being pushed into the increasingly dangerous practice of fire fighting in an age of rapid and violent climate change/disruption (Lurie 2015; Marks 2019). Many of these are age-old problems but have become part of the new terrain of environmental justice struggles as imprisoned persons and their allies are now being heard. These trends reflect troubling intersections of imprisonment and environmental injustice, but also the ways in which penal institutions amplify their punitive and repressive practices vis-a-vis inmates, in order to signal an expansion of criminalisation. In other words, serving a prison sentence is one layer of criminalisation (incarceration) that is then combined with another layer (environmental injustice) that indicates a further criminalisation of despised populations.

The linkages between environmental racism and criminalisation are quite palpable when we consider current US immigrant policy, which is an apparatus that routinely brings the full force of institutional violence against migrants and refugees (Loyd et al. 2012). One study found that there are numerous immigrant prisons located in sites that are plaqued with extremely hazardous chemicals in the ambient air, land, and in water tables; chemicals that are known to be associated with developmental disorders, neurological damage, respiratory illnesses, and cancer (Vazin 2019). These findings are of great concern to immigrant justice advocates because numerous children who have been separated from their families and parents are imprisoned at many of these facilities. For example, in the summer of 2018, the Tornillo Detention Center was constructed to house immigrant children on the US side of the Texas/Mexico border, a site with 3800 beds for minors who were exposed to extreme heat and other harsh environmental conditions (Morel and Michels 2018). The largest immigrant prison in the nation is in Dilley, Texas, a place often called "the waste epicenter" (Bernd 2017) of the Eagle Ford Shale, a 30-county region where 20 saltwater disposal wells pump fracked wastewater back into the ground. The Karnes County Civil Detention Center is

another immigrant prison in the region and has been described as the "drilling epicenter" of the Eagle Ford Shale, a region with several well blowouts, local evacuations, and where the majority of residents report major environmental health problems. Karnes County is the single largest oil-producing county in the US (Earthworks 2018) and the water at the prison is heavily chlorinated and immigrant prisoners report that it smells and tastes foul (Bernd 2017). Studies of the area have found an excess of benzene, hydrogen sulfide, cyclohexane, naphthalene, n-hexane, and xylenes in the air and volatile organic compounds in the water (Earthworks 2017; Hildenbrand et al. 2017). Vazin (2019:11) reports that the "women and children at this facility are not provided with filtration masks or other ventilation measures to mitigate the exposure to air pollutants, or provided free alternatives to tap water at Karnes, which is unacceptable". As is the case at many immigrant prisons around the nation, inmates routinely resist through hunger strikes, sit-ins, and other means of protest and defiance against this brutal system. The International Energy Agency (IEA) forecasts that growth in US oil production will meet 80% of new global demand for oil in the coming years, with much of that growth coming directly from oil produced by fracking in Texas (Worland 2018). Thus international migrants, refugees, and asylum seekers are caged, with children often separated from their families, and placed at great risk of exposure to contaminated water as an indirect result of repressive, militaristic US foreign policies in Latin America as well as climate change-induced drought, and as a direct result of the intersection of oppressive anti-immigrant policies and an intensified commitment to global fossil fuel production, amplifying nativism and global climate injustice. The fact that the immigration prison system targets and disrupts families—with unique impacts on men, women and children—indicates how gender, age, and nationality are social categories that are highly relevant in environmental justice struggles.

The connections among criminalisation, climate injustice, and environmental injustice collide quite violently at State Correctional Institution Fayette in Labelle, Pennsylvania (a majority Black and Brown town), where prisoners (who are overwhelmingly working class and people of colour) are forced to endure life next to a coal ash dump containing an estimated 40 million tons of coal waste and two coal slurry ponds. The Abolitionist Law Center and the Human Rights Coalition undertook a year-long investigation of the health consequences of this exposure and revealed that an unusually high percentage of prisoners report declining health and symptoms and illness consistent with exposure to toxic coal waste (McDaniel et al. 2014). These symptoms include cancer, respiratory, throat and sinus conditions, thyroid disorders, blurred vision, fatigue, hair loss, dizziness, headaches, gastrointestinal problems, and much more. Moreover, residents of the nearby town of LaBelle suffer from the exact same health conditions. One inmate, Nicholas Morrissey, told investigators: "I can't even control my body anymore ... My life has been completely changed in the last year ... I went from an athletic and healthy person to a frail sickly man who can barely walk" (ibid.). Another SCI Fayette prisoner stated: "I have four years left on my sentence and that could be a death sentence with the contamination here" (ibid.). One particularly noteworthy aspect of that study is that most prisoners' symptoms and illnesses did not

emerge until after they arrived at SCI Fayette, and, in numerous instances, prisoners who left the facility experienced dramatic improvements in health.

Richard Mosley is an African American man who did time at SCI Fayette and when he began experiencing illness symptoms and received no satisfactory response from prison officials, he took action by filing a lawsuit against the prison. Mosley was eventually released from SCI Fayette, having served his sentence. Soon after his departure from prison, he joined an organisation whose goal is to shine a light on the injustices at SCI Fayette and to seek real change. In a grassroots newsletter published in 2018, Mosley articulates his group's aims:

We, the Fayette Justice Health Committee of Put People First! PA are determined and steadfast in seeking justice for those who have been affected and are currently being affected by health and environmental hazards at SCI Fayette and in and near LaBelle, PA. (Put People First! PA 2018)

The Put People First! PA website (https://www.putpeoplefirstpa.org/who-we-are/) links their healthcare campaign to the scale of the human body as well as to a range of social categories of difference, thus highlighting the need for transformative change across a broad swath of populations and a wide spectrum of space:

Everyone gets sick. We all have bodies, and we all need care ... Put People First! PA gives voice to everyday people who are struggling to meet our basic needs. We define our basic needs as things we need to live healthy and fulfilling lives—things like education, housing, health care, jobs at living wages, food, and a healthy environment ...

This is a key component of abolitionist theory, practice, and politics—the idea that in order to abolish the prison system, we will need to effect deep change across all social institutions and spaces so as to remove the power of the prison as a "fix" for a range of social problems and needs, and to empower people to organise and manage our communities collectively and democratically (Gilmore 2007). The organisations and activists considered in this paper are building on a long history of intersectional and coalitional work that links struggles for health care with human rights and environmental justice in a larger framework that also confronts structural violence (Loyd 2014). And the roles of nonhuman agents are ever present if we pay attention. For example, deadly chemicals like dioxin and carbon-based coal have highly destructive impacts on human and ecological well-being, creating disease and anthropogenic climate change, but they also play important roles in motivating people to take direct action.

The SCI Fayette prison is a site of environmental injustice that is inherently linked to the world beyond the prison because: (1) the coal ash dump and slurry ponds are adjacent to and outside the prison, but clearly have impacted the quality of life inside the prison and among residents of the nearby town of LaBelle; (2) the coal waste on the site comes directly from coal-fired power plants, which are believed to be the single greatest contributor to global anthropogenic climate change; and (3) coal-fired power plants are at the heart of struggles for environmental and climate justice since African Americans are more likely than whites to live near these facilities, contributing to the highest asthma rates of any racial/

ethnic population in the US. These exposures also contribute to higher rates of cardiovascular disease, respiratory illness, and infant mortality in Black communities (Ellison and Jones 2015). Thus racial capitalism and environmental injustice converge to produce deadly consequences for both people of colour (on both sides of the prison wall) and for fragile ecosystems.

Finally, from the other side of this dynamic, we see that prisons have direct impacts on ecosystems, including the ways that sewage and other water discharges, chemical toxins, fossil fuels, air pollution, and hazardous waste that are produced inside prisons affect nonhuman species and communities in waterways, ambient air, and nearby land bases. For example, the Monroe correctional complex, north of Seattle, Washington, has had numerous sewage spills into the Skykomish River since at least 2006. The Skykomish River is well known for its healthy populations of steelhead trout and other wildlife. It is a popular destination for fishing, rafting, kayaking, and swimming, so when hundreds of thousands of gallons of sewage were dumped from the prison into this waterway recently, both human and nonhuman populations were placed at great risk (Anderson 2015). The volume of sewage in many prisons has increased as a result of "tough on crime" policies that have produced a spike in imprisoned populations over the last several decades. Thus, more-than-human actors and spaces are impacting and deeply impacted by the prison system's production of hazards that also threaten human health.

The sites examined here span a range of carceral geographies, where activists have registered a host of concerns for human rights, public health, and environmental integrity. These include: the struggle for environmental justice on both sides of the prison wall to confront this form of state violence to which both inmates and surrounding communities are variously but unevenly subjected; workplace environmental justice campaigns in prisons where inmates labour in hazardous electronics recycling operations; the fight to ensure basic dignity and human rights among immigrants in ecological and carceral sacrifice zones; demands that link human health with climate justice in a zone of the industrial excreta of coal-fired power plants; and the ways in which nonhuman spaces and species are placed at great risk by the prison system's routine functions. These cases reveal how states and other powerful institutions expand the practice of criminalising populations by locking people up and by deeming them unfit to breathe clean air, unworthy of drinking clean water, and undeserving of living in structures that sit atop clean soil. These institutional phenomena signal that criminalisation is frequently amplified and given greater force and impact through environmentally unjust practices. But they are also being challenged by prisoners and their allies in a dynamic prison environmental justice movement.

Conclusion

There are many institutions and actants involved in the production of environmental injustices through the prison system. There are also numerous NGOs, networks, and individuals entangled in resisting that violence and promoting environmental justice, abolition, and other forms and possibilities of marronage.

Some of the groups noted in this article—Mothers of East LA, the Silicon Valley Toxics Coalition, the California Prison Moratorium Project, Critical Resistance, the Campaign to Fight Toxic Prisons, and the Fayette Justice Project—have all contributed in key ways to the cause of abolition.

EJ studies scholar Sacoby Wilson (2016) prefers to use the term "environmental slavery" instead of "environmental racism" to capture the full impacts and realities of oppression as it concerns the intersections of environmental harms in communities of colour. If we were to take Wilson's idea and invitation seriously, we would have to ask what could environmental justice look like if we thought of environmental racism as a form of enslavement? We would, therefore, have to think of environmental justice in the context of abolition. Building on Wilson's perspective, I argue that environmental racism is also a form of criminalisation, so abolition must involve resisting the power of the prison industrial complex to profile and harm people on both sides of the prison walls.

In many jails and prisons across the US, incarcerated persons are leading the movement for environmental justice, with support from allies on the outside, to challenge state authorities to provide adequate and safe drinking and potable water, to provide health care and liveable climate conditions, to clean up sewage spills, and to support safe working conditions. Anti-prison resistance in these cases is not only a form of environmental justice struggle, but it also constitutes practices of "marronage" in that they are efforts to envision and bring into being dreams of freedom and spaces of liberation for peoples subjected to the ravages of racial capitalism.

This is also a story that reflects the importance of thinking about environmental justice conflicts at the microscale, at the bodily level. An emphasis on the body and embodiment reflects a core focus in feminist environmental justice in particular and feminist scholarship in general. Rachel Stein (2004) and Cherríe Moraga (1993) argue that when we redefine our bodies as "lands", "homes", and "environments", then we can more effectively personalise and politicise environmental justice for peoples whose bodily wellbeing is often placed at risk from a range of threats. Thus, the body becomes a site of environmental injustice and resistance, and abolition efforts are ideal political formations for highlighting those impacted bodies and communities—both human and more-than-just human—in liberation struggles. Incarcerated and formerly incarcerated persons like Bryant Arroyo, Richard Mosley and their allies like the Abolitionist Law Center and the Campaign to Fight Toxic Prisons are doing critical work to challenge environmental injustice in the prison system. This is an important component of abolitionist practice because it opens up the possibility of addressing the fact that prisons are unsalvageable systems of mass violence and sites of environmental racism, which would mean that addressing these phenomena credibly and productively would necessitate linking them and confronting their roots in centuries-long systems of racial capitalism.

Imprisoned and formerly incarcerated activists are mobilising in spaces of immobility and mobilising allies beyond the prison walls. They produce ideas and actions that migrate across these borders and walls constructed by the state and industry. Thus, prisoners and formerly incarcerated persons challenging the

system through petitions, hunger and labour strikes, lawsuits, speaking out and other forms of activism are practicing freedom, environmental justice, and abolition. They are creating practices of marronage within and around their prison cells and cellblocks, and across the broader social and political networks they have built. Thinking socioecologically about these dynamics allows us to examine and support the ways in which human and more-than-human communities, the built environment, and ecological habitats become entangled and agentic under even the most repressive and oppressive conditions. In other words, if imprisonment/enslavement is an imposed restriction on the right to (noncoerced) mobility, then prison abolition is an embrace of movement—of social movements as producers of ideas, (noncoerced) bodily movement, and socioecological transformation (for an important consideration of coercive mobilities, see Gill 2016). Addressing the ways in which environmental racism functions as a form of criminalisation allows for a theory and practice that insists on noncoerced mobility as a core component of freedom and environmental justice. Abolition ecology, critical environmental justice, and marronage converge to offer a framework in which marginalised populations and their allies resist domination and violence and promote practices and structures that enable humans and nonhumans the freedom and power to support life-giving actions and to promote webs and relations of indispensability beyond the control of the state (Bledsoe 2017; Heynen 2016; Roberts 2015).

These acts of resistance are also important because the US prison system in particular and the prison industry in general continue to flex their power at the macro or global scale, in at least three major ways. First, the criminalisation, surveillance and incarceration of people migrating from other nations—with a particular emphasis on persons from Mexico and Central America—reveals how the US prison system has international and global impacts on disrupting communities beyond its borders. Second, the export of US policing practices to other nations is legion, including approaches that intensify repression against entire communities, such as the "broken windows" theory of policing (Camp and Heatherton 2016). Third, state-sanctioned prison systems around the world continue to incarcerate marginalised populations at disproportionate rates in order to exert repressive control over those groups and to neutralise grassroots dissent, including, for example, the longstanding practice of arbitrarily detaining and torturing Palestinian men, women, and children suspected of revolutionary political activity and denying them food, medical care, and family visits (Baroud and Aljamal 2019; Human Rights Watch 2019; Welch 2015). And fourth, the largest private prison corporation in the US—the GEO Group—also operates prison facilities in numerous nations around the globe. This is part of a broader pattern of privatisation of prisons that has resulted in the construction of such facilities in, for example, South Africa, Germany, Canada, Australia, Israel, Thailand, Russia, and Hong Kong, among others (Sassen 2014). Moreover, the privatisation of prisons is reinforced through the parallel privatisation of medical treatment, food services, and healthcare in carceral institutions throughout the world—all of which constitute core environmental justice concerns as they reflect the ways in which authoritarian practices shape the health and wellbeing of vulnerable populations.

However, states remain the ultimate arbiter of penal violence, whether through private or government-run facilities around the world (Moran et al. 2016), suggesting that efforts to realise radical solutions to state violence must ultimately involve imagining and working for such visions beyond the state. Thus, while this paper has focused on the US prison space, other literatures and activist struggles allow us to think about the wider and uneven geographies that underpin practices of incarceration as it relates to environmental justice. Those uneven geographies indicate how race, class, gender, age, nationality, and nonhuman status intersect across various environmental justice conflicts in prisons and can be a source of oppression as well as liberatory possibility.

Returning to Bryant Arroyo's story: if he could shut down a coal gasification plant from within the belly of the beast that is the US prison system, uplifting himself and hundreds of his fellow inmates, changing the power dynamics between free and unfree and securing an extraordinary victory for environmental justice from within the context of such violent captivity, then surely those of us on the other side of the prison walls in the "free world" must be able to exercise far greater power and promise than we ever imagined, and can truly go much further toward creating new knowledge and transformative social change in the interests of environmental justice, abolition ecologies, and marronage.

Acknowledgements

The author would like to thank Megan Ybarra, Nik Heynen, Katherine McKittrick, Andrew Kent, Jasmine Vazin, and the anonymous reviewers of this paper.

Endnotes

¹ In fact, the number of persons incarcerated in the US is actually significantly higher since those official statistics do not include youth in juvenile prisons.

² Grineski and Collins (2018) find that many schoolchildren across the US face toxic levels of air pollution in their classrooms, with low-income groups and students of colour far more likely to be affected. The findings, published in the journal *Environmental Research*, rely on EPA and census data to examine some 90,000 US public schools. The study found that African-American and Latino students, in particular, are more likely to attend schools near industrial sources of air pollution tied to neurological harm—including lead, mercury and cyanide.

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