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Building an Abolitionist Understanding of Disaster Risk Reduction

THESIS

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in Social Ecology

by

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ACKNOWLEDGEMENTS

In recognition of, deep gratitude to, and solidarity with

New Orleans residents and organizers

whose continued worldbuilding, resistance and strategizing against a racist state

demonstrates concretely:

Another world is not only possible. She is on her way. On a quiet day, I can hear her breathing.

Arundhati Roy

War Talk

ABSTRACT OF THE THESIS

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Climate change is strengthening the magnitude and increasing the frequency of disasters, meaning disaster risk reduction practitioners are facing greater challenges than ever, especially regarding inequity in disaster experiences. This thesis uses the case study of Hurricane Katrina to argue that abolition-based (rather than reform-based) frameworks more effectively address disparate impacts that marginalized communities experience after disasters in the United States. Scholars of environmental justice and climate change policy have worked extensively to capture the failings of U.S. disaster policy, with Hurricane Katrina in New Orleans heavily documented in the literature as a strong example of structural racism and the failures of neoliberalism in disaster policy. However, existing disaster literature and policy have not adequately considered abolishing the structures responsible for creating disproportionate vulnerability and unjust disaster recovery. Abolitionists specifically seek to eliminate structures of oppression relevant to their goals and build more just systems in their place. With such a focus, and building from the Black radical tradition of abolition, this paper argues that abolitionist philosophies have great

potential to both unearth and address root causes of disproportionate vulnerability, thereby potentially improving disaster response. The paper concludes with examples of abolitionist praxis in New Orleans that have blossomed since Katrina, models with the potential to combat the structural forces responsible for marginalization during disasters in the U.S.

Keywords: abolition, disaster, state violence, Hurricane Katrina, racial capitalism, environmental justice

INTRODUCTION

Catastrophic disasters are worsening in frequency and intensity as a result of global climate change (Zagorsky, 2017). Extreme weather events like hurricanes, wildfires, and droughts have led to enormous loss of human life and infrastructure, and scientists project they will only continue to do so (Bernstein & Rice, 2012). The impacts of these disasters are felt most severely by physically and/or socially vulnerable populations (Andrey & Jones, 2008), and even with significant efforts by often well-meaning people, disaster risk reduction (DRR) strategies have still not improved to the point that those affected by disasters face entirely equitable levels of risk or equitable resources for recovery (Jacobs, 2019). People put on the margins of society continue to experience a "disaster after the disaster" (Schuller, 2008, p. 17), and despite the responsibility policymakers and academics in the field of DRR hold to lessen the dangers that come with disasters (Wisner, 2020), the field has been tepid with its suggestions for improvement and policy adjustments (Jacobs, 2019). In this thesis I ask both why and what can be done.

Though this thesis grounds itself in a U.S. context, inequitable disaster recovery is a worldwide phenomenon - seen in South Africa, Russia, Sri Lanka, Poland, Argentina, Malaysia, and Iraq (Klein, 2007). The routinely stratified effects of natural disasters have caused many to cease calling these events "natural " in order to acknowledge how the aftermath of disasters is socially constructed (Keegan, 2020; O'Keefe et al., 1976, Chmutina & Von Meding, 2019). Rodríguez (2007) reflects that disasters may be seen as inevitable or unavoidable physical events, but some of the suffering that accompanies them must be understood as entirely distinct and rather manufactured. In other words, harmful physical processes can have a "natural" component, but people are only affected by them based on the degree that they are unprotected

(Wisner, 2020). In reality, there is a well-documented global pattern of states preselecting the survivors of disasters through social, economic, and political processes (Smith, 2006). People labeled more socially vulnerable to disasters, often along lines of race, class, gender, sexuality, ability, incarceration status, documentation status, age, and others, are *made* vulnerable by those same processes (Cardona, 2003; Wisner, 2020; Jacobs, 2019). All this to say, despite the implication of many scholars and policymakers, vulnerability is not an inherent condition; it is made, and therefore it can also be unmade (Jacobs, 2019).

Racial capitalism is one such process, a system creating disparate impacts for people of color, with disasters heightening these disparities even further. Racial capitalism, as conceived by Robinson (1983), signifies the global and national commodification of nonwhite people for social and economic gain, usually by a predominantly white institution. It understands racism as inseparable from capitalism, based on how the two have co-evolved to exist as a unified system of globalized economic white supremacy (Robinson, 1983). This paper will focus on Hurricane Katrina, one of the clearest examples of how deeply rooted processes like anti-Black racism and capitalism mesh with weakly reformed disaster policy to create disproportionate vulnerability to disasters. This can be seen specifically through centuries of neglect of New Orleans' Black and poor communities via domestic economic policy, along with the Federal Emergency Management Agency (FEMA)'s woeful preparation for and response to the storm. Racial capitalism is foundational to the United States and U.S. disaster policy; yet, scholars of disaster risk reduction rarely name it as a factor, much less a creator of social vulnerability.

However, these are not to be mistaken as the only processes constructing vulnerability. For example, colonialism leverages disasters to entrench vulnerability and further itself in Puerto

Rico, where racialized “citizens" are less likely to receive governmental disaster aid than those on the mainland (Rivera, 2020; Cortes, 2018). The cisheteropatriarchy allows for queer, trans, and gender nonconforming individuals to be left out of disaster scholarship almost entirely, leading to a norm of post-disaster discrimination (Gaillard, Gorman-Murray, and Fordham, 2017). Lastly, structural ableism transforms what could be mere hazards into life-threatening disasters for many disabled and elderly people, where a power outage stemming from the risk of wildfire can be a matter of life or death (Coulibaly, 2019; Belser, 2015). In these ways and others, structural issues have been clearly documented as the underlying cause of disproportionate vulnerabilities to disasters, as opposed to the traditional understandings of vulnerability in the field, which usually do not go so far as to name, much less challenge, the causes of vulnerability (Jacobs, 2019).

Yet, despite recent growth in the field of DRR in terms of acknowledging the systemic causes of inequitable disaster experiences, certain groups remain more vulnerable to disasters (Wisner, 2020). In the United States, efforts to improve disaster response from the top-down have relied on reform-based approaches, which have included, for example, restructuring governmental agencies, increasing diversity and inclusion efforts, and heightening intragovernmental collaboration. While some of these reforms are partially successful at reducing the disparities faced by historically marginalized communities affected by disasters (e.g., federal and state guidelines have led to more flood-resistant planning at local levels; Kaswan, Flournoy & Verchick, 2018), they clearly do not get at the heart of the issue, considering that disasters continue to be felt most deeply by historically marginalized communities. Case in point: an example most recent to the time of writing, many decried the

inequitable power outages following a Texas snowstorm, leaving Black, Latinx, and low-income neighborhoods without power and/or water for up to a month (Yancey-Bragg & Jervis, 2021). Reforms do not challenge the root systems causing disparate vulnerability, but they are popularly suggested because truly challenging the roots of structural inequality (systems like racial capitalism, patriarchy, and settler colonialism) would endanger the very foundations of the United States (Kojola & Pellow, 2020).[1]

I argue that abolitionist thought is integral to improving disaster response, both as a social theory and a social strategy. Abolition is a broad, centuries-old strategy, first (and still) used against the institution of slavery,[2] and now used in many areas of society by activists challenging inequity as its roots (Ranganathan and Bratman, 2019, p. 116). Abolitionist vision entails abolishing (i.e., eliminating) the named system, of course, but it also demands the construction of new systems in its wake (Gilmore, 2019, p. 14). For example, prison abolitionists have been building alternatives to the carceral system for decades (e.g., restorative justice circles, providing access to a support system), understanding that upon the elimination of prisons and police, a legitimately just system must be in place to rehabilitate those who commit harm (Cullors, 2019). In a similar manner, those invested in challenging constructed social vulnerability in order to create equitable disaster outcomes would use abolitionist strategy to challenge the pertinent systems as well as to support community-led approaches to DRR. Abolitionist strategy is vital to

[1] The field of DRR is not unique in its utilization of ineffective reform-based strategies for improvement. For example, domestic economic policy reform often falls short of its goals by failing to address the root systems that cause economic disparity (racial capitalism) (Robinson, 1983). Similarly, police reform has been widely denounced by activists and scholars as an exercise in futility, even serving to strengthen a racist system (McDowell & Fernandez, 2018).
[2] The 13th amendment of the U.S. Constitution made prison slavery legal, a practice that exploits mostly Black and Brown people for unpaid or grossly underpaid coerced labor (Gilmore, 2007).

the field of DRR because reform is fundamentally limited in its ability to challenge the systemic issues causing disparate vulnerability.

Abolitionist thought is not new in general, nor to the academy, but it is seldom applied to disaster risk reduction policy, and thus the goal of this discussion is to reflect upon the consequences of popular approaches to DRR and the real-world possibilities that could arise from disaster response scholars confronting vulnerabilities from their roots. While the term "abolition ecologies" has not been sharply defined in existing literature, building off of Nik Heynen (2016) and W.E.B. Du Bois (1935), I argue it is both an approach to understanding and to addressing the interconnectedness of oppressive systems functioning across society. Situating DRR within the framework of abolition ecology, I argue, would begin to unsettle narratives of inherent vulnerability by challenging the intertwined systems that created them.

In this paper, I review how systems of oppression have affected disaster response, using the example of Hurricane Katrina in New Orleans, and analyze how effectively reform-based and abolition-based disaster response frameworks address the root causes of vulnerability to disasters. I make the argument that in the wake of disasters worsening in severity and frequency, reform-based recommendations, such as making flood insurance paperwork available in multiple languages, are helpful, but only to an extent. Reform to a system can only go so far when that system is historically steeped in settler colonialism,[3] capitalism, and white supremacy, where human beings drown not only in floods but in "bureaucracy and institutional neglect" (Bonilla & LeBrón, 2020, p. 17); someone will always be left behind or excluded purposefully under these

[3] Settler colonialism is an "ongoing system of power that perpetuates the genocide and repression of indigenous peoples and cultures" (Cox, 2017).

systems. An abolitionist framework to disaster response, already being carried out by frontline communities, has the potential to create alternatives to this violence prescribed by the state.

I use Hurricane Katrina as a case study, because it is one of the clearest and most well-documented examples of how racism, capitalism, neoliberalism,[4] and other systems of oppression operate during disasters, and thus the most logical example to see what can be gained by using an abolition ecologies framework. Katrina was one of the strongest hurricanes to ever make landfall in the contiguous United States, the third deadliest, and with one of the longest periods of emergency recovery and reconstruction; the latter two characteristics I will explain as a result of both systemic oppression and inadequate governmental coordination. In this thesis, I focus most specifically on anti-Black racism and capitalism, which in some ways flattens the lived identities of New Orleans residents by reducing their experiences to a few factors (i.e., race and class). I do attempt to highlight intersectionality of oppressions where possible, but obstacles relevant to improving disaster recovery that I do not touch on as much, such as colonialism, structural ableism and the cisheteropatriarchy, should be substantively analyzed in future research applying abolition ecologies to DRR. Furthermore, while each locale certainly has its own particularities and contexts to consider, abolition can be (and is being) utilized as a valid strategy to address multiple systems of oppression worldwide (Lipsitz, 2004).

A truly ideal research study would be in collaboration with residents involved in the experience of and recovery from Hurricane Katrina. Those with lived experience of the disaster would have the clearest understanding of how abolitionist strategy could work in New Orleans;

[4] Neoliberalism characterizes a society that worships "freedom, efficiency, and profit" over the needs of its people and environment, it "seeks not so much a free market, but a market free for powerful interests" (Cleaver, 1997; Al-Kassimi, 2019, p. 3).

however, due to the COVID-19 pandemic, I was unable to make this study participatory, and instead relied on secondary document analysis using a variety of sources, including government reports, peer reviewed journal articles, zines, and editorials. Including and legitimizing knowledge presented in seemingly less-official sources, such as zines, is a vital step towards valuing the expertise of people impacted firsthand by natural disasters.

In what follows, I begin with the conditions of my case study, Hurricane Katrina, explaining the historical context upon which the hurricane fell as well as the immediate response by governmental and non-governmental actors, grounded in neoliberalism and militarism. I use the case study of Hurricane Katrina to juxtapose reform-based recommendations for DRR policy post-Katrina, such as making DRR policy more inclusive and restructuring FEMA, with an abolitionist framework of DRR. I argue that an abolitionist theory and praxis committed to eliminating the structures creating disaster inequality could, correspondingly, eliminate the systemic inequalities themselves. Because "abolition is about presence, not absence" (Gilmore, 2019, p. 14), I fortify this framework with examples of New Orleans residents that are already challenging and transforming systems, through local solidarity economies and community autonomy.

Background on Katrina

> What we saw unfold in the days after the hurricane was the most naked manifestation of social policy towards the poor, where the message for decades has been: "You are on your own." Well, they really were on their own for five days in that Superdome, and it

> was Darwinism in action - the survival of the fittest. People said: "It looks like something out of the Third World." Well, New Orleans was Third World long before the hurricane.
>
> — Cornel West, "Exiles from a City and from a Nation"

Hurricane Katrina fell on the Gulf Coast in August of 2005, devastating the low-lying city of New Orleans and beginning a long process of recovery and struggle for its majority-Black residents. The most severe impact of Katrina was experienced by New Orleans, a city of 484,674 people, whose population fell to an estimated 230,172 a year after the hurricane (Plyer, 2016). The damage was understood by many to be a function of racism and classism, in that Katrina fell most harshly upon Black and poor areas of the city, and the residents of these areas still face the most difficulties in returning (Hartman & Squires, 2006).

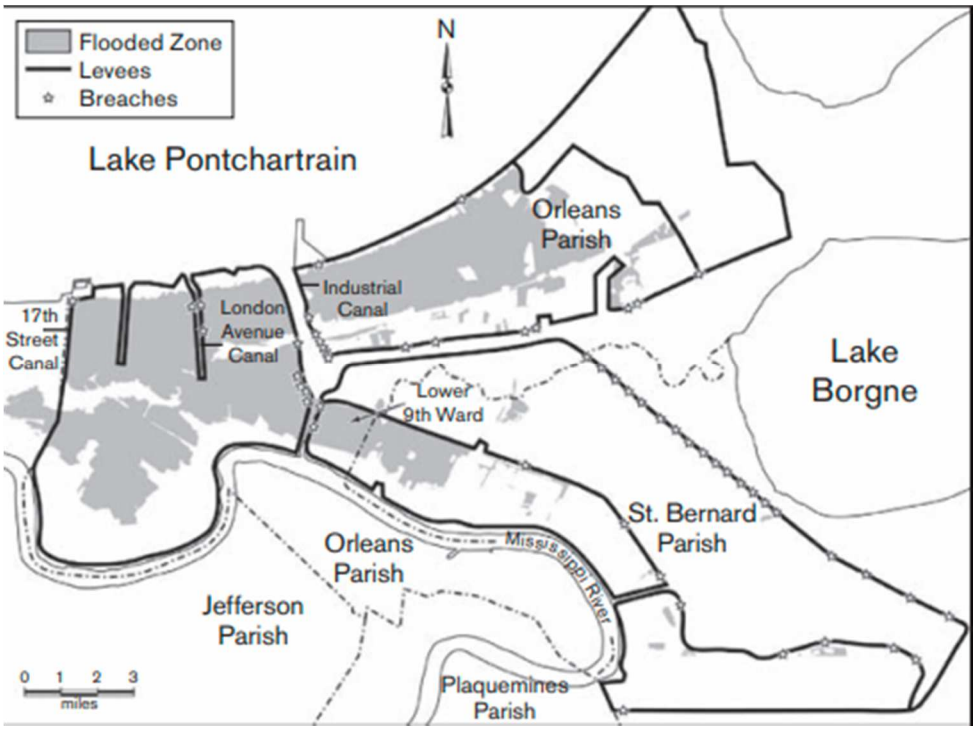
In this section, I give a brief description of the hurricane and ensuing flooding of the city, outline the disparate effects of Katrina on the residents of New Orleans, and include historical context that underscores why Katrina and its fallout were foreseeable (and indeed, predicted by grassroots organizers of New Orleans).

Hurricane and Immediate Response

With sustained wind speeds of 140 mph, Hurricane Katrina hit the Gulf Coast on August 29, 2005 (Pine, 2006, p. 37), leading to the deaths of at least 1800 people, displacing over 2 million residents, and causing as high as $400 billion in damages across the Gulf Coast (Lowe & Shaw, 2008, p. 803). Over fifty failures of inadequate levees and floodwalls protecting the city and the gradual erosion of protective wetlands led to flooding of 85% of the city (Noel, 2014;

Curtis, 2008); the mixed-income, majority Black neighborhood of the Lower Ninth Ward experienced truly catastrophic flooding (Figure 1; Seed & Bea, 2008). In its two days on land, the Category 5 storm damaged over 70% of occupied homes and thirty power stations, causing significant disruptions for tourism and gambling industries (Sorce, 2012; Curtis, 2008). The hurricane's floodwaters, which rose as high as 20 feet in New Orleans, were contaminated by raw sewage and chemicals from industrial waste sites, as well as materials from leaking landfills and a toxic Superfund site (Noel, 2014; Curtis, 2008).

Figure 1. Levee breaches and flooding after Hurricane Katrina



SOURCE: E. Yodis and C. E. Colten, Geography of Louisiana (New York: McGraw-Hill, 2007)

Due to institutional failures at all levels (Eikenberry et al., 2007, p. 164), Hurricane Katrina had the longest emergency response period (six weeks of activities like search and rescue, struggling to meet emergency housing and food needs, flood water drainage) compared to any similar disaster in U.S. history (Colten, Kates & Laska, 2008)[5].

Governmental Actors

Angela Noel (2014) recounts how FEMA and other governmental agencies floundered in the six weeks following the storm: despite FEMA itself predicting one year prior a storm of Katrina's severity in the Gulf Coast, the agency was utterly unprepared for the devastation Katrina wrought (p. 76). The governor of Louisiana declared a mandatory state of emergency only one day before the hurricane's landfall, requesting 700 emergency evacuation buses from FEMA, but receiving only 100 (Noel, 2014, p. 76). Hundreds of thousands of low-income people without private transportation were trapped in New Orleans during the storm, many of whom sought refuge in the Superdome (designated by Mayor Ray Nagin as a shelter of last resort) (Colten et al., 2008, p. 39), where FEMA was not prepared to provide adequate food, water, or medication (Farmer, 2011, p. 17). An occupant of the Superdome at the time described their experience in the Superdome as "worse than a jail", another saying police and national guard "had their guns on people like they were criminals" (Coker et al., 2006, p. 90).

Governmental response to Katrina that those on the ground experienced has been widely criticized by activists and academics as overly militarized, racialized, and classed (Wood, 2016;

[5] Colten, Kates and Laska (2008) provide this metric by comparing Katrina to the San Francisco earthquake of 1906 (the most comparable disaster on record), whose emergency response period lasted four weeks (p. 43).

Noel, 2014; Giroux, 2006; Cleaver & Clark, 2014). The federal government hired private military companies (e.g., 164 Blackwater troops, among others) and mobilized tens of thousands of fully armed National Guard troops and military helicopters to assist local police with "crime prevention" and the protection of private property (Scahill, 2005, p. 3; Cleaver & Clark, 2014, p. 16). A dawn-to-dusk curfew was implemented despite the need for many residents to search for missing family members and neighbors past 6pm (Noel, 2014). "Law and order" narratives prevailed, undergirding disproven myths of post-disaster riots, looting, and murder (Tierney, Bevc, and Kuligowski, 2006), and contributed to the police shooting of 6 unarmed Black civilians and the formation of white militias also reported to be harassing and murdering low-income Black residents (Drake, 2014; Cleaver & Clark, 2014). Noel (2014) argues that the federal treatment of New Orleans was "that of a security mission abroad, not about saving their own citizens" and considering the amount of resources poured into military response, not enough effort was expended on search and rescue or medical aid (pp. 77-79).

Non-governmental actors

Angela M. Eikenberry, Verónica Arroyave and Tracy Cooper (2007) assert that it is not to be inferred that there was not enough aid available for New Orleans to recover from Katrina; quite the contrary, the researchers explain that aid poured in from around the world, proffered by individual donors and international non-governmental organizations (INGOs) (Noel, 2014, p. 82). While international organizations received late or no response from FEMA regarding their offers to help, domestic non-profits like Red Cross sucked up donations with little accountability

or equity in distribution (Noel, 2014, p. 83).[6] Black activist Joe Leonard asserted that in the first 72 hours following Katrina, the Red Cross provided better services in majority-White areas of New Orleans rather than Black areas (as cited in Associated Press, 2005). Despite 3.3 billion dollars in private aid and help from INGOs like International Rescue Committee, the American Refugee Committee, the Red Cross, UNICEF, the American government failed to adequately use and direct the help, in what Eikenberry et al. (2007) call a "voluntary failure" of the government (p. 166), who would rather "control" the situation through brute military force (Noel, 2014, p. 82). These researchers document the top-down response to Katrina as largely one of philanthropic insufficiency and militant overpolicing.

Despite apparent failures from above, New Orleans residents "braved dangerous conditions to rescue neighbors and strangers alike… locals were some of the first people on the front lines" (Zervigon, 2020). Indeed, Colten et al. (2008) observed that non-agency actors were indispensable in providing resources and responding to unmet needs, but were "ignored or poorly used by the emergency response structure (p. 43). As will be discussed more in the section on abolitionist frameworks, New Orleans locals demonstrated the power of collective care and local autonomy through their ability to take charge of what Clara Zervigon (2020) identified as "rebuilding and long-term resilience efforts".

Much of the government aid meant for rebuilding and resilience, however, went to corporations in no-bid contracts totaling 3.4 billion, leading to mass privatization of the disaster

[6] The American Red Cross received $2.1 billion in private donations specifically to aid those affected by Katrina. However, Eikenberry et al. (2007) document that many residents of New Orleans post-Katrina were left to rely on churches and INGOs, despite their lack of training in disaster relief, as neither the American Red Cross nor FEMA reached them with any help.

recovery process (Klein, 2007). This privatization included the construction of charter schools and demolition of public housing to make way for urban renewal, an act that many locals understood to be a process of gentrification and what James Baldwin (1963) might have interpreted as "negro removal" (Wood, 2016, p. 22). In these ways, for many local politicians and investors, Katrina was an opportunity. One of the closest advisors and richest contributors to the mayor of New Orleans was quoted saying a few weeks after Katrina that "those who want to see this city rebuilt want to see it done in a completely different way: demographically, geographically and politically…" (as cited in Powell, 2007, p. 865); a Baton Rouge congressman was quoted saying after Katrina, "we finally cleaned up public housing in New Orleans. We couldn't do it. But God did" (as cited in Klein, 2007, p. 4). Lastly, according to the director of the consulting firm making millions off the rebuilding of New Orleans schools, Hurricane Katrina provided "an incredible opportunity" to start over "with an almost clean slate" (as cited in Saltman, 2009, p. 139).

In sum, the inadequate response of governmental agencies such as FEMA and the military meant that external aid was misdirected, corporations were handed billions to perform governmental responsibilities, and civilians were left to fend for themselves. Next, I will catalogue how residents of New Orleans were affected by the inadequate response to Katrina.

An Uneven Recovery

While an incredible opportunity for the elite profiting from the storm, Katrina was devastating for most residents of New Orleans, with the burdens of the disaster distributed unevenly across the population. Remarking on the disparities along lines of race, class, and gender in New Orleans disaster recovery, Jean Ait Belkhir and Christiane Charlemaine (2007)

assert that although disasters themselves do not discriminate, they occur within certain structural conditions and institutional power dynamics that do. Despite multiple warnings to government officials that a disaster like Katrina was inevitable due to the insufficiently funded levee projects, action was not taken to protect the mostly poor, Black communities of New Orleans (Giroux, 2006). As Henry Giroux (2006) frames it, thousands of residents died and over a million were displaced as neoliberal, colorblind disaster policy and anti-Blackness collided with a natural disaster whose magnitude was amplified by climate change.[7]

Many scholars and activists found FEMA's response to Katrina to be a case in point of colorblind disaster policy, with ramifications clearly along lines of more than solely color (Ella, griffin, & Bierria, 2010; Henkel, Dovidio & Gaertner, 2006; Craemer, 2010). They note repeated incidences of FEMA's policy failures, stemming from a refusal to engage with the effects of current and historical racism in FEMA's past (i.e., "colorblind") and in the areas FEMA works, creating patterns of racial disparity in their work. Prominent environmental justice scholar Robert D. Bullard asserts in an interview that the disaster was clearly not Katrina, it was the response; specifically, the lack of disaster planning for Black and poor people created the disaster (as cited in Curiel, 2005). Bullard explains that for him, "it's hard not to see race when you see who's been plucked from the rooftops and who's been quartered in the squalid, health-threatening conditions of the Superdome" (as cited in Curiel, 2005). Despite the monumental lesson to be learned from Katrina, many researchers assert that FEMA continues to struggle with

[7]The discourse surrounding Katrina in the years since the storm has shifted to identifying the hurricane as a socially constructed catastrophe rather than a natural disaster, but Giroux (2006) notes that the initial characterization of Katrina as "natural", rather than socially constructed, allowed the U.S. media to tease apart the roles of race and class for the world to see, in a way state manufactured coverage of political catastrophes, like war, would never (p. 192).

its self-stated commitment to diversity and inclusion (FEMA, 2018).

For example, Thomas Craemer (2010) documents how FEMA's plan for aid distribution after Katrina resulted in significant racial disparities in the distribution of trailers, with predominantly Black neighborhoods of both low and high income receiving less trailers from FEMA than white neighborhoods, a pattern to be echoed by FEMA for Black and Hispanic residents following Hurricane Harvey in 2017 (Hamel, 2017). Scott Pippin et al. (2017) explains how some residents of New Orleans were entirely unable to access recovery aid because they had no formal deeds to their informally-inherited land, to be repeated in Puerto Rico following Hurricane Maria. Underscoring further how the bureaucratic institution actually presented as an obstacle to recovery for multiple communities (Anderson & Soto, 2020), Bonnie Haskell (2014) explains how myriad families were separated during the resettlement process due to FEMA's heteronormative interpretation of "family" as consisting of opposite-sex partners and their dependents, and that many transgender individuals had difficulty accessing aid due to names not matching official records (another pattern of FEMA's, according to Alys Brooks (2019)). Nada Elia et al. (2010) notes that it is in this way, and many others, that institutional aid is repeatedly used as a ¨tool of control and manipulation¨, where neoliberal governments and NGOs decide the form, timing, conditions, and exceptions for aid[8].

Anti-Black Structural Racism in New Orleans

The difficulty in accessing bureaucratic aid was one of many reasons that the rate of return for displaced Black residents of New Orleans was slower, and return itself less likely for

[8]See Muñiz (2006) for FEMA's history of discouraging, denying, or ignoring the needs of Latinx residents recovering from disasters.

Black residents (Fussell, Sastry & VanLandingham, 2010). In addition to struggles with FEMA, Black residents of New Orleans also face historical legacies of racism and plantation slavery, such as ongoing gentrification and segregation, all underscoring how history is always present (Ranganathan & Bratman, 2020, p. 132). While known to many Americans for its rich musical history and complex French, Spanish, and Native American influences (Noel, 2014), New Orleans has a deep and often unacknowledged legacy of colonial and racist violence that is crucial to understanding the disparate impacts of Katrina.[9] Zervigon (2020) explains that in addition to the physical and mental trauma plantation slavery caused, it also severely limited the financial situations of Black people "both due to the enslavement of many and the strict economic laws imposed upon both free and enslaved Black people", entrenching a racial and class hierarchy that has yet to be repaid with reparations (p. 17).

Compounding the traumatic legacy of the plantation tradition in New Orleans are severe local pollution and poverty, documented extensively in environmental justice scholarship. The majority Black Lower Ninth Ward neighborhood of New Orleans has been suffering the presence of over 150 petrochemical plants within an hour's drive, part of the infamous "Cancer Alley" with rates of cancer three times the national average (Harvey, 2016)[10]. In conjunction with this environmental injustice, New Orleans is one of the most segregated cities in the U.S

[9] The area of New Orleans was occupied by the French in 1718, stolen from the Indigenous Chitimacha people, and became over the course of the century a major site for slave trading (Zervigon, 2020). The existing sugarcane plantations surrounding New Orleans, as well as the monuments to Confederate generals, enslavers, and KKK members, now lie as evidence to the violent exploitation of Black and Indigenous people in the city (Take Em Down NOLA, 2021).
[10] Many of these plants were built on the sites of former plantations - sold after the Civil War to oil companies - and are built directly on or adjacent to the cemeteries of enslaved Black people (Blanks et al., 2021).

(Noel, 2014); according to Robert Kates et al. (2006), the dearth of affordable housing forced the city's most impoverished residents to the most vulnerable areas of New Orleans, below sea level (p. 14654), which led directly to more housing damage when the substandard levees protecting them broke (Fussell, Sastry & VanLandingham, 2010).[11] The Army Corps were aware of flaws in the levees they had created, and their inaction also contributed to disproportionate destruction and death in Black neighborhoods (Harden, Walker & Akuno, 2007; Fussell et al., 2010). Moreover, the median income in 2004 of families in the flooded Black neighborhoods of New Orleans was "only $25,759 a year, barely more than half the national average", while the median income for whites in New Orleans was around $60,000 a year (Lowe & Shaw, 2009, p. 806; Plyer & Gardere, 2018, p. 19). The effect of low wages and segregation on the residents of the area translated to statistics boding poorly for evacuation and return likelihood: "more than 54 percent of impoverished households and 65 percent of impoverished-elderly households did not possess a car, truck, or van in 2000" (Lowe & Shaw, 2009, p. 806).

As Caroline Keegan (2020) notes, the "disproportionate death and dispossession experienced by low-income Black residents following Hurricane Katrina are part of a longstanding "plantation tradition" of racial domination and selective neglect, rather than as an incidental and unfortunate result of a "natural" disaster" (p. 6). Selective neglect was quite evident in report given by the National Prison Project of the ACLU in 2006, as it was revealed how thousands of disproportionately Black incarcerated people were abandoned during Katrina, left without food, water, ventilation, and medication, with many trapped in chest-deep chemical

[11]Yet another factor prohibiting return for low-income, Black residents to their homes was the refusal of the U.S. government to restore moderately damaged but structurally sound subsidized housing (Adelson, 2015).

or sewage contaminated water[12]. Orleans Parish Prison sheriff Marlin Gusman declared "the prisoners will stay where they belong" (Welch, 2015), had no evacuation plan for them, and thus 500 humans were declared unaccounted for in the report (National Prison Project of the ACLU, 2006).

Anti-Black structural racism, past and present, has had devastating effects in New Orleans, and it has led the majority-Black city to lose many of its Black residents permanently, whether to death or displacement. Black population in New Orleans fell from 68% in 2005 to 60% in 2015, meaning over 100,000 Black residents no longer live in the city, while white populations increased 9% in the same ten year period (Adelson, 2015).

Notable Intersections

While racism has been clearly documented throughout the literature on Katrina as a factor contributing to recovery disparities, it is vital to recognize how multiple forms of oppression compound injustice post-disaster in order to avoid further violence towards multiply marginalized people[13]. Intersectionality, coined by Black feminist scholar Kimberlé Crenshaw in 1991, describes how identities and social categories work together to produce benefits and burdens across bodies and space. The analytical tool of intersectionality originally sought to complicate understandings specifically of how Black women experienced oppression, recognizing how racism and sexism work simultaneously rather than independently, with

[12]At the time of Katrina, the parish was only 66.6% Black, but the prison's population was 90% Black (Rhodes, 2010, p. 2061).

[13]There are many other examples of how intersecting oppressive systems impacted Katrina survivors: for more information on the intersections of structural and interpersonal homophobia in Katrina, see: Dominey-Howes, Gorman-Murray and McKinnon, 2012; on the intersections of race and sexuality in the regrowth of New Orleans, see Haskell (2019).

cumulative rather than additive effects (Crenshaw, 1991). It has since been extended to analyze other intersecting oppressions and tailor resistance accordingly (Bauer, 2014).

For example, the disproportionate effects of disasters on impoverished disabled people highlight how facets of classism and ableism pervade policy, and intertwine, to transform what could be mere hazards into life-threatening disasters (Coulibaly, 2019). During Katrina, this intersection could be seen as thousands of disabled evacuees struggled to cope without mobility aids and healthcare (Bloodsworth et al., 2007). Along lines of race, gender, and age, misogynoir (anti-Black misogyny) meant non-elderly Black women were the most likely to develop mental and physical health problems after Katrina (Sastry & Gregory, 2012). Lastly, in badly flooded neighborhoods like Mid-City with high proportions of sexual minorities of color, the destruction of housing by the storm meant many LGBTQ+ individuals were left without psychological or physical safety, and had to brave public shelters with their partners and their identities laid bare (D'ooge, 2008)[14]. Gaillard, Gorman-Murray and Fordham (2017) describe the danger of doing so in a militarized post-disaster environment, evidenced plainly by the arrest of a Black transgender woman for simply trying to shower at a public shelter after days without refuge from Katrina's fallout.[15]

[14] U.S. emergency shelters are often unequipped for the privacy needs of transgender or intersex individuals, or individuals who require privacy to take their medication (Dominey-Howes, Gorman-Murray & McKinnon, 2014). Pre-existing conditions like HIV are more likely amongst the LGBTQ+ community, and stigmatized, making shelters an even more afflicting environment, especially considering reduced access to medication during disasters (National Transgender Discrimination Survey, 2010; Ochi et al., 2014).

[15] Black trans women are arrested at a rate ten times that of the general population (National Center for Transgender Equality, 2017). The criminalization of transgender people, disproportionately women of color, is rooted in the U.S. policing system; state-sanctioned racial profiling and hypersexualization of transgender people as sex workers together lead to disproportionate levels of police violence (Carpenter & Marshall, 2017).

To put it succinctly, it is widely acknowledged that the immediate aftermath of Hurricane Katrina as well as New Orleans' long recovery were characterized by immense injustice. A long history of structural racism and environmental injustice in the city meant that Black residents suffered greatly from the disaster and it ensured that those who were evacuated were less likely to return to their city. The uneven ramifications of Katrina are extremely significant for both residents and disaster scholars looking to prevent such a reoccurrence.

DRR Literature Review: Popular Responses to Katrina

This section highlights common responses to and analyses of Hurricane Katrina by academics and policymakers in the field of DRR, in order to lay the groundwork for a later comparison with an abolitionist response. Some of these responses include a focus on building community resilience; theorizing the process of disaster capitalism; and reforming disaster policy. I briefly summarize each of these narratives and the critiques that have followed them, underscoring the flaws in these select DRR academic and policy responses in order to lay the foundation for my own recommendations later on.

Neoliberal Narratives of Resilience

Resilience is defined in a disaster context broadly as the ability to absorb and resist disturbance as well as to adapt and grow afterwards (Tierney, 2015, p. 1331). As a concept, resilience originated in the discipline of ecology but has been used since in fields ranging from social science, economics, and engineering (Tierney, 2015, p. 1329; Norris et al., 2008; Song et al., 2015). Alexander Fekete et al. (2019) understands resilience to be a trend, questioning, like many other scholars and activists, whether an academic bandwagon effect has led to an

overestimation of the utility of the term. As will be explained later on, a multitude of scholars have criticized those who romanticize resilience so much that supposedly "resilient" communities are actually harmed (Figueroa & Rolon, 2020; Bahadur & Tanner, 2014; Walker & Cooper, 2011). Raven Cretney (2014) documents the rising co-optation of resilience by neoliberal interest groups globally, coming to the conclusion that these groups' resilience strategy essentially places all the responsibility for coping with disasters on disadvantaged communities rather than making meaningful effort to disrupt the systems disproportionately exposing them to disasters. Cretney (2014) adds that many grassroots organizers' conceptualization of resilience, promoting community-driven solutions to environmental and social issues, proves quite different from that of global elites (p. 634). Despite the controversy, resilience has since become more and more part of disaster risk reduction policies, in tandem with what Tierney (2015) calls neoliberal politics of recovery (p. 1329). Together, the two concepts have greatly shaped U.S. disaster policy and the expectations for the individuals that suffer disasters.

After Katrina, New Orleans was praised widely for bouncing back from the disaster (Go, 2018; Zervigon, 2020), its recovery and redevelopment seemingly satisfying one of the key tenets of resilient city planning (Béné et al., 2018). However, Kathleen Tierney (2015) noted that plans for recovery and resilience in the region tended to overwhelmingly favor a certain kind of survivor, those willing and able to navigate unending bureaucracy and take on debt in the meantime. Other kinds of Katrina survivors were seen as less "deserving" and were left to take care of themselves or to seek aid from struggling community, religious, and/or nonprofit organizations (Tierney, 2015, p. 1339). Idealization of resilient citizens and cities can have

devastating effects, as explained by Tracie Washington, lawyer and activist, after the Shell oil spill in New Orleans: “I never want to hear the word *resilience* ever again. Resilience means you can hit me again” (as cited in Bonilla, 2020, p. 42).

Many scholars have since spelled out the overarching harm a romanticized form of resilience can wreak: not simply by encouraging survival and recovery on an individual or community basis, but also by neglecting to challenge the larger political and economic systems that prompt the very threats to survival (Figueroa & Rolón, 2020; Bahadur & Tanner, 2014, p. 200). Further critique of resilience labels it as a return to the status quo, an “acceptance of disequilibrium” within the same structural conditions that allowed for disproportionate vulnerability to occur, which risks assigning inherent marginalization to a population rather than acknowledging how marginality may be a direct result of government policy (Walker & Cooper, 2011, p. 154; Jacobs, 2019).

Khaled Al-Kassimi (2019)’s study on resilience finds that neoliberal politics of recovery have replaced more traditional disaster risk reduction and mitigation language, in his analysis of Department of Homeland Security (DHS) documents published in 2007. Al-Kassimi (2019) explains that neoliberalism is an ideology that prioritizes freedom, efficiency, and profit over the needs of people and environment, and it “seeks not so much a free market, but a market free for powerful interests” (p. 3). Through his analysis, Al-Kassimi (2019) found that in the years since Katrina, the state has transferred much of the onus of crises and providing safety unto individuals, with the justification that terrorism, financial crises, and environmental disasters are not entirely preventable or predictable, and thus citizens must be resilient themselves and embrace a “culture of preparedness” while the government plays more of a supportive role.

Published ten years after the National Strategy for Homeland Security memo, FEMA's 2018-22 Strategic Plan is still chasing after a self-described "culture of preparedness", with goals ranging from the purchase of "resilience bonds" by local jurisdictions from insurance companies, to expanding homeowners' flood insurance, to increasing civilian financial and general preparedness for disasters.

Sarah Molinari (2019) points out how this fantasy of a resilient culture of preparedness is an unrealistic strategy for historically marginalized communities that are most at risk during disasters. Molinari asserts that the individual living in this institutionally-designed illusion is most likely "a private property-owning individual who has a formal property title, home insurance, flood insurance, savings in the bank, and a ten-day supply of food and water for each person in the household". Many New Orleans residents, however, did not have the means to buy into a culture of preparedness, even lacking reliable access to transportation for evacuation (Farmer, 2011). Al-Kassimi (2019) explains that it is this continued neoliberal reliance on individual preparedness (encapsulated in language of resilience) rather than on state responsibility for disaster response that contributed to the catastrophe of Katrina in 2005, and continues to manifest clearly in U.S. disaster response as recently as 2017.

Tierney (2015) adds that neoliberal politics of recovery do not entirely depend on individual preparedness, but also public-private partnerships. She explains that the public-private partnerships that were supposed to be superior agents of disaster management failed to provide promised essential services to survivors of Katrina, instead relying on neoliberal, market-driven logic to profit off of the privatization of security, education, and housing, as will be discussed more in the next sections (Tierney, 2015). The government also relied (and relies) heavily on

faith-based organizations (FBOs) to participate in disaster recovery, the sentiment summed up well by former President Barack Obama acknowledging the capabilities of FBOs and the need for collective action: “no matter how much money we invest or how sensibly we design our policies, the change that Americans are looking for will not come from government alone. There is a force for good greater than government” (as cited in Hackworth, 2012, p. 1). Jason Hackworth (2012) understands this to be a clear admission of a government outsourcing its responsibilities, as part of a “religious neoliberalism” at odds with the welfare state.

Lastly, some scholars critique neoliberal narratives of resilience because they center racist and classist solutions “that directly hindered communities ‘bouncing back’”; for example, the privatization of education systems and the gentrification of housing in New Orleans were lauded as examples of the city bouncing back, but these solutions led to increased policing and evictions (Ranganathan & Bratman, 2019, p. 120). Malini Ranganathan and Eve Bratman (2019) continue to explain that even when resilience narratives truly center on “climate proofing” the future, those seeking resilience outcomes do little to “assess the rooted experiences, knowledges of, and approaches to sudden and slower-moving stressors among frontline communities”, which clarifies why top-down strategies for resilience in DRR often backfire (p. 119). These slower-moving stressors, such as gentrification and food insecurity, receive less attention from disaster practitioners because they aren’t explicitly tied to disasters or sustainability, leading scholars such as Michael Méndez, Flores-Haro and Zucker (2020) as well as Robert Nixon (2011) to label them slow violence. The term slow violence underscores the incremental harms that heighten vulnerability for many communities exposed to disasters (Méndez et al., 2020). By ignoring slow violence and its structural creation, resilience strategists miss the opportunity to explicitly

address in their disaster planning the social forces that create vulnerability to disasters (Ranganathan & Bratman, 2019).

Disaster Capitalism and its Critiques

Intricately tied to the critiques of market strategies embedded within resilience narratives, *disaster capitalism* arose as a theory to explain the economic and social factors at play in New Orleans; however, some scholars found that this theory only partially explained the structures responsible for disasters (Bonilla, 2020), specifically because it failed to take into account structural racism as one of the roots of the crisis in New Orleans (Schuller & Maldonado, 2016).

Disaster capitalism was theorized by Naomi Klein (2007) to explain how crises, including natural disasters, are aggressively exploited by governmental institutions, corporations, and investors to implement sweeping, radical neoliberal policy changes. By quickly yet systematically enforcing democratically unpopular reforms such as deregulations, privatizations and the deconstruction of social services in a moment of crisis and as a condition of aid, capitalism is unilaterally strengthened at violent cost to disaster survivors (Klein, 2007)[16].

Though Klein's concept is helpful in explaining the logistics of the process, the theory of disaster capitalism hinders a deeper understanding of how structural inequality operates during a crisis, as authors Mark Schuller and Julie K. Maldonado have pointed out. Schuller and Maldonado (2016) explain that disaster capitalism can only address the aftermath of a disaster,

[16] The privatization and deregulation is justified under the neoliberal ideology that private-sector actors deliver are "both more efficient and more effective at delivering" formerly government services "from health insurance to welfare, retirement benefits, and incarceration" (Tierney, 2015, p. 1334).

and therefore is not helpful for identifying the structural roots of a specific area's vulnerability (p. 67). Specifically, Klein's work *The Shock Doctrine* leaves out crucial understandings of how racism in the U.S. explicitly allowed for and encouraged the erosion of public services (Schuller & Maldonado, 2016, p. 67). For example, through the lens of disaster capitalism, the mass educational privatization that happened after Hurricane Katrina in New Orleans was a policy waiting to be implemented, millions of dollars waiting to be made by a predominantly white tiny business and political elite through government contracts (Saltman, 2009, p. 139)[17]. The critical lens that Kristen L. Buras (2011) provides, however, offers necessary context for understanding how structural racism allowed for a massive neoliberal experiment to occur on the children of the city[18]:

> For most of their history, public schools in New Orleans were not intended to support children of color or their black teachers but were instead considered the property of southern whites. The history of slavery, legalized segregation, ongoing racism, and white flight from the city has translated into strategic state neglect and disinvestment in African American education. (p. 299)

The public schools of New Orleans were already failing their students before Katrina, and the Orleans Parish School Board was actually in the midst of partial privatization in June of 2005

[17] Educational privatization, specifically publicly-funded and privately run charter schools, has been continuously pushed by advocates of neoliberalism as the future of educational equity, despite mounting research demonstrating that "these policies, by design, trap poor students of color and students with disabilities in disinvested schools while their white, able, and middle-class peers enjoy access to several well-resourced schools" (Waitoller, Nguyen & Super, 2019, p. 286).

[18] Structural racism, defined by Powell (2007), is "made up of the macro level systems, social forces, institutions, ideologies, and processes that interact with one another to generate and reinforce inequities among racial and ethnic groups."

(two months before Katrina) (Buras, 2011).[19] Racism, capitalism, and neoliberalism functioned concurrently in New Orleans before and after Katrina, and an understanding of the rise of neoliberal policy and resilience narratives in the United States as a function of racism (tied to racial capitalism) rather than solely class and greed, allows one to recognize how and why Black people are often more impacted by disasters. Fayola Jacobs (2019) explains that naming the systems of racism and racial capitalism as historic and current obstacles (a recognition seldom made in the field) are basic steps to improving our response to disasters.

Policy Reforms: Beyond Resilience and a Recognition of Structural Inequality

Building from more nuanced understandings of community resilience, structural racism, and disaster capitalism, academics from fields ranging from emergency management, legal studies, and urban planning have demonstrated concrete understanding of how vulnerability to disasters is socially constructed (Wisner, 2020; Bene et al., 2017; Cardona, 2003). Accordingly, many have suggested policy reforms to reduce risk for those made to be most vulnerable during disasters. Some existing suggestions for the disaster response field that I will summarize include diversity and inclusion efforts, reforms to FEMA, and improvements to community resilience planning.

Like many bureaucratic institutions in America, disaster management has been called "too white" (Frank, 2020). Ensuing recommendations include diversifying emergency managers in the U.S., in the hopes that more representation from communities disproportionately impacted

[19] Yarimar Bonilla (2020) explains how Black Americans are expected to cope with substandard public services *and* with incessant shocks and traumas, affixed to the racial bias of Black people having higher pain tolerances and so receiving substandard pain medication (p. 43).

by disasters will bring equity to the field (Brown, as cited in Frank, 2020). Relatedly, some policy suggestions in the disaster response literature aim to include more people as subjects of disaster planning, so that no one is left behind during disasters or in the recovery process. For example, Marcilyn Cianfarani (2013) advises emergency shelters to be equipped with spaces for people on hormone therapy and those living with HIV to take medications privately, as well as the infrastructure and connections to supply medications long-term (more than a week, at least). Jennifer Rumbach & Kyle Knight (2014) recommend emergency shelters provide all gendered toilets and showers as well as specific anti-discrimination policies and training to their employees. In a report on disaster preparedness in urban immigrant communities, Ann Bessie Matthew and Kimiko Kelly (2008) emphasize that disaster responders at all levels must "better coordinate and enlist translations of vital documents, mobilize interpreters in communities that need them, and consider cultural and linguistic needs when creating emergency preparedness plans" (p. 11), a recommendation also given by Sloane Burke, Jeffrey W. Bethel, and Amber Foreman Britt in their 2012 study of disaster preparedness among Latino migrant and seasonal farmworkers, and by Méndez et al. (2020) in their study on Latino and Indigenous immigrant workers facing wildfires. These considerations were still pending in 2017, as evidenced by FEMA's response staff on the ground in Puerto Rico post-Hurricane Maria overwhelmingly not speaking Spanish (Molinari, 2019). Disaster practitioners continue to make recommendations that governments improve their emergency response to be more inclusive; Michael Méndez et al. (2020) recommends that local and state governments collaborate with community organizations to translate emergency communications and better understand diverse cultural needs that may arise during disaster.

One standout category of policy recommendation suggested in the disaster response literature involves reforms to FEMA's structure. Ashley Morey (2012), along with 27.4% of state, local, nonprofit, and private emergency managers polled by Daniels in 2007, suggested restructuring FEMA and its funding. FEMA, a previously independent government agency, was placed within the Department of Homeland Security in 2003; in 2004, one year before Hurricane Katrina, DHS published the memo "How Terrorists Might Exploit a Hurricane" and the Rand Corporation was contracted to draft the National Response Plan to disasters rather than FEMA (Farmer, 2011, p.15). Al-Kassimi (2019) finds this year prior to Katrina to be a prime example of institutional incompetence, as it demonstrates how DHS's frenzied focus on counterterrorism and border security in the wake of 9/11 is a conflict of interest with their capacity to prepare for and respond to disasters (especially considering a storm of Katrina's magnitude and location was predicted by FEMA in 2001) (Noel, 2014, p. 75). In her recommendation that FEMA be separated from DHS, Morey (2012) emphasizes how FEMA's location within DHS alongside Immigration and Customs Enforcement (ICE) creates a distrust amongst undocumented populations, considering ICE "could be in a position to prosecute the very people FEMA is charged with assisting" (p. 289), a distrust further compounded by FEMA's infrequent confirmations of confidentiality in regards to immigration status (p. 271).[20]

Lastly, Tierney (2015) explains that practitioners and academics don't necessarily need to abandon community and societal resilience as goals, especially considering the plentiful environmental hazards that will likely increase with the rise of climate change, "there is clearly a

[20] For a more robust understanding of the barriers undocumented populations face in accessing disaster aid, see Méndez et al. (2020).

need for more robust efforts to protect lives, property, and societal functioning." Accordingly, many scholars continue to reach for ways to expand resilience while being critical of the ways it can reinforce systemic issues. Ranganathan and Bratman (2019)'s study demonstrates that the beneficiaries of resilience planning do not need to be private contractors or corporate executives, they can be local residents if those in power put genuine effort into listening, learning, and being led by residents (p. 120). Participatory action research has been used by researchers like Michael Paolisso et al. (2012) to center community values and desired outcomes when designing local disaster mitigation and adaptation plans. On the governmental side, scholars Shirley Laska (2012) and Hyunjung Ji and David Lee (2019), suggest more collaboration between local, state, and federal governments in order to build community resilience and mitigate the effects of hazards. Ji and Lee (2019) explain that in the past two decades, the federal government has downsized programs meant to encourage community-level disaster mitigation planning, but a redistribution of funding to such efforts would enable local governments to improve their disaster preparation and response.

The Limitations of Reform

While the proposed reforms to structure and policy briefly summarized above are important, and will likely improve outcomes for many people following disasters, they do not address the root causes of vulnerability to disasters in the way that abolitionist strategy can. Critical Resistance (2020), an abolitionist organization, outlines the difference between reformist reforms and abolitionist steps to social change: reformist reforms continue or expand the reach of the structure in question, while abolitionist steps "work to chip away and reduce its overall

impact" (p. 1). For example, hiring more diverse emergency managers does little to challenge structures of inequity, because "diversity without structural transformation" cannot itself challenge necessary power dynamics (Davis, 2018). When analyzing the kinds of policy recommendations traditionally given by DRR strategists, they often involve further resourcing bureaucratic and neoliberal systems, which are steeped in long legacies of racism, colonialism, classism, sexism, homophobia, transphobia, ableism, and more.

According to political philosopher Charles W. Mills (2011), the United States itself is a settler colonial state built from slavery and genocide (pp. 594-599), whose current existence is dependent on white supremacy and ensuing erasure of Indigenous peoples' sovereignty, as specified by lawyer Monika Batra Kashyap (2019, p. 553) and interdisciplinary scholar Marisol LeBrón (2019, p. 171). Thus, reforms grounded in governmental frameworks cannot truly address the vulnerabilities that the United States itself creates and is based on. Or as abolitionist Audre Lorde (1984) understands it, "the master's tools will never dismantle the master's house". Put into the context of anti-Black structural racism, Manu Karuka (2017) explains that anti-Blackness is foundational to the United States, and thus Black liberation cannot be achieved through state frameworks (the very same that perpetuate Black suffering) (p. 86). Moreover, many scholars have noted that much of the population the U.S. government supposedly protects are othered along aspects of their identity and made vulnerable to premature death; some are positioned as permanently criminalized people who are "ineligible for personhood", a pattern made especially visible in New Orleans through Katrina (Cacho, 2012, p. 6; Mills, 2011; Márquez, 2014). Giroux (2006) explains these processes are partly due to decades of neoliberalism weakening the social contract between the U.S. government and most of its

population - so much so that specific populations "are already seen as dead within a transnational economic and political framework", they "now occupy a globalized space of ruthless politics in which the categories of 'citizen' and 'democratic representation,' once integral to national politics, are no longer recognized" (p. 182). Thus, because the United States is based in structural injustice at its foundation and has never recognized some of its own inhabitants as worthy of civil rights, reform to governmental institutions arguably has limited potential in improving post-disaster outcomes. This context is important because, as Jacobs (2019) notes, understanding the broader and historical context of current injustices is necessary to being able to effectively address them.

A key example of the limitations of reform is FEMA. FEMA is a top-down bureaucratic institution whose aid is weighted by militarism and bureaucracy and thus has itself been a historical obstacle to disaster recovery, despite attempts at reform (Farmer, 2011). Upon creation in 1979, President Carter transferred "civil defense" responsibilities to FEMA from the Defense Department (Farmer, 2011, p. 11). From there, directors selected for the organization had extensive military experience, and FEMA spent billions of dollars preparing for nuclear war between 1982 and 1991 (Farmer, 2011). However, at the time of Hurricane Katrina, "five of the eight top officials at FEMA had *no* disaster experience" including its director Michael Brown, "but were instead loyal appointees of President Bush" (Noel, 2014, p. 80, emphasis is original). Moreover, since FEMA was placed within Department of Homeland Security (DHS) in 2003, it has lost funding to counter-terrorism and national security (Farmer, 2011). The most recent example of this was 2019: at the peak of the 2019 hurricane season, $155 million from FEMA's disaster relief fund was transferred to DHS for detention center funding (Grisales, 2019). While

moving FEMA out of DHS would improve its funding prospects and its accessibility to undocumented survivors of disasters, it would still be grounded in militarism by the nature of its creation for "civil defense" (Tierney & Bevc, 2007; Farmer, 2011, p. 11). FEMA functions to maintain this mission, which Dylan Rodríguez (2007) argues is the defense of the American empire and the existence of global white supremacy - both of which require global militarism (by the U.S. military, among others). For Rodríguez (2007) and others, the state-facilitated death of Black people in New Orleans during Katrina is key evidence of FEMA's institutional commitment to upholding this mission, a mission that will exist as long as America's commitment to upholding the sanctity of white life (p. 134).

Furthermore, as evidenced by FEMA's specific patterns of inequity detailed in Section 2, FEMA's bureaucracy is not only exhausting to disaster survivors (Bonilla & LeBrón, 2020), but it has also presented as a pointed barrier to recovery for those at the government-designated margins of society. These margins encompass "most notably, incarcerated persons, LGBTQ and gender non-conforming people, people with disabilities, sex workers, communities representing a 'demographic threat,' and those perceived as a burden on the state" (Elia, griffin, & Bierria, 2010). Those margins might occasionally shift, with some groups granted inclusion after decades of organizing (such as the legalization of gay marriage in 2015), but arguably, in a state governed by racial capitalism, there will always be a group on the margins, a community of people under-resourced by and disposable to the state (Anderson & Soto, 2020). However, there are alternatives; to understand how an abolition ecology of DRR might look, it is worth paying attention to how historically marginalized communities have survived apart from government aid and top-down resilience narratives.

Abolitionist Framework

James Lewis (2012) notes that the greatest failure of disaster risk reduction policy is its disconnect with other areas of policy and governance, its single-minded focus on disasters causing it to lose touch with the ability to truly address the main causes of people's vulnerability to disasters. As is evident in much of the literature discussed above, it is clear that systemic and structural issues are the root of why certain marginalized communities suffer more through disasters, and thus one response framework is to abolish oppressive systems, such as racial capitalism, settler colonialism, and carceral institutions. Rather than focus on reforming the inequitable bureaucracy offered by the U.S. government, abolition shows another way forward. I build off scholars and activists' work, especially Ranganathan and Bratman's understanding of abolitionist climate justice (2019) and Jacobs' (2019) Black feminist and radical planning critique of US-based social vulnerability literature, to argue that a framework of abolition ecologies can reshape how disaster scholars respond to the underlying structures responsible for devastating post-disaster outcomes. Specifically, I show how residents of New Orleans demonstrate the possibilities of an abolitionist disaster response through their grassroots organizing post-Katrina up till the present day.

Understanding Abolition Ecologies

Though commonplace for decades in activist circles, the strategy of abolition has only recently been integrated into academic discussions of environmental and climate justice (Gilmore, 2019, p. 15), birthing a framework of "abolition ecologies", that I argue belongs in disaster risk reduction scholarship as well.

Abolition is a centuries-old tradition rooted in Black radical thought, and manifests as a framework in historic and current movements to end slavery, mass incarceration, racial capitalism, and structural racism (Ranganathan and Bratman, 2019, p. 116). Black Lives Matter co-founder Patrisse Cullors (2019) defines abolition as "a praxis that roots itself in the following principles: people's power; love, healing, and transformative justice; Black liberation; internationalism; anti-imperialism; dismantling structures; and practice, practice, practice" (p. 1685). Cullors (2019) explains that abolition, as based in the Black radical tradition, necessitates the destruction of white supremacy as well as the U.S. empire's tradition of international and domestic violence (p. 1686); abolition is not about eradicating injustice at every scale, but focusing resistance on concrete systems that cause injustice at every scale (Critical Resistance, 2020). Importantly, an abolitionist strategy also requires the construction of just and life-affirming structures, because abolition is not about absence, but presence (Gilmore, 2019, p. 14).

Eduardo Mendieta (2005) explains that to be able to build justice in this country, those interested must begin with abolition democracy - "the abolition of institutions that advance the dominance of any group over any other" (p. 16), such as white supremacy. Originally proposed by W.E.B. Du Bois, abolition democracy is "the democracy that is to come, the democracy that is possible if we continue with the great abolition movements in American history, those that opposed slavery, lyunching, and segregation" (as cited in Mendieta, 2005, p. 16). It refuses to idealize often-sought inclusion into unjust social structures, rather demanding transformation (Du Bois, 1935). For example, one strategy within an abolition democracy materializes as a challenge for society to collectively abandon the social construction of whiteness (Robinson, 1983, xxxi; Ignatiev & Garvey, 1993). Because the construct of whiteness has systematically

favored one group of people in order to disenfranchise others, for centuries, its abolition would destroy the main foundation for systemic racism in the U.S.: white supremacy (Ignatiev & Garvey, 1993).

Nik Heynen and Megan Ybarra (2020) build directly from the abolition democracy, also considering Gilmore's contributions to the concept, in making an abolition ecology. The authors explore abolition as a tool in their field of urban political ecology (UPE), a field already centered on understanding the ways social, ecological, economic, and political forces create and shape inequity, in order to explore Gilmore's (2007) call to "make freedom as a place" (p. 227). The authors explain that, within UPE, an abolition ecology recognizes how spaces of detention, incarceration, policing, and deportation are not unique or extraordinary circumstances, but quite common for people of color who are forced to live, work, and play within these carceral geographies (p. 22). Heynen and Ybarra (2020) use abolition in UPE to name the systems that are impacting urban places and creating vulnerability, such as settler colonialism and carcerality, *and* to name the systems necessary to replacing them, centering "political ecological imperatives of access to fresh air, clean water, sufficient land, amelioration of toxic chemicals, and beyond" (p. 22). The authors expose how racial capitalism, for example, exploits poor people of color through systemic inequity dating back to slavery and continuing today through modern prison slavery and wealth hoarding. An abolitionist understanding of racial capitalism in UPE recognizes its deep roots and interrogates the possibilities of a more egalitarian society, as informed by the experiences of the exploited (Heynen, 2016, p. 120). In 2018, Heynen built on this understanding, asking those interested in disrupting exploitation to look for emancipatory politics within histories of uneven development, to find "something to stretch for, to hope for, to

organise for, to demand" (p. 96). Heynen (2019) asserts that abolition must be grounded in its own history in the U.S., intertwined with Black and Indigenous struggles for land and life, in order to make genuine progress towards urban democratic goals (p. 125). Recognizing abolition ecologies as both a way of understanding and of challenging systems of inequity, an abolition ecology within disaster scholarship could force a confrontation with the vulnerabilities that are designated upon certain communities, especially those that predispose them to heightened suffering from disasters.

While there are many systems of oppression that manufacture disparities in disaster, a key example of one already the target of a sizable abolitionist movement is the U.S. prison-industrial complex (PIC). U.S. prisons themselves are institutions that make the people inside more vulnerable to disasters, most recently seen by a string of state governments forcing incarcerated people to "shelter in place" for Category 4 and 5 hurricanes (Mutual Aid Disaster Relief, 2019) and during the COVID-19 pandemic (Boughton, 2020). Additionally, environmental justice advocates Pelllow et al. (2018) found that U.S. prisons are coming to be associated more and more with toxic impacts upon the land and those incarcerated within (disproportionately Black, Brown, and LGBTQ+) (Pellow et al., 2018). Because Southern plantation owners did not want to lose their free labor, the 13th amendment to the U.S. Constitution made prison slavery legal, opening the doors for mass criminalization and exploitation of Black people, and actually beginning the prison system as we know it (Browne, 2007**;** Gilmore, 2007). This means that among other punitive measures, incarcerated people are forced to prepare societies for disasters and deal with a magnified fallout afterwards while sheltering in place; they prepare sandbags, fight wildfires, and clean up toxic chemical spills

post-hurricane, all "to restore a status quo that only comforts those outside the walls" (Kelly, 2019). The violence of this system, originally meant to re-enslave Black workers, falls hardest at the intersections of race, gender, sexuality, and class, and is only magnified by natural disasters (Vitulli, 2013, p. 112; Browne, 2007, p. 79). Based on an understanding grounded in history, prison abolitionists organize to eliminate prisons and cultivate just approaches to harm, thereby tackling the root problem and creating transformative solutions.

Similarly, disaster scholars and policymakers should consider explicitly addressing the violence perpetrated against incarcerated individuals through both slow and rapid exposure, considering the everyday disaster of continuous toxic exposure that many historically marginalized communities, especially incarcerated individuals, face (Pellow et al., 2018). This is one example of many potential actions that could be taken as part of an abolitionist strategy for disaster scholars and practitioners. Collaborating with abolitionists and integrating their logic into disaster scholarship could allow a clearer confrontation of the root vulnerabilities at play in "natural" disasters, such as carceral systems in America (Gilmore, 2007).

Understanding Katrina through Abolition Ecologies

Adding abolitionist philosophy into our understanding of what DRR can look like is one way to "work through intellectual silos" and imagine "nature free from white supremacist logics" (Heynen, 2016, p. 842). Meaning, Lewis' (2012) criticism of disaster scholarship being too single-minded can be addressed, if disaster scholars begin to name and challenge the links that have been identified between disasters and other social issues, such as wealth inequality, white supremacy, and the prison industrial complex (Jacobs, 2019; Pellow, 2019). This broadened

understanding of the interconnected nature of these issues is central to directly addressing the social forces creating vulnerability to disasters.

Using this framework, Hurricane Katrina is still understood to be a severe event with devastating impacts for those on the Gulf Coast. However, the militaristic response to the storm was not as astonishing as portrayed by the media. Leonard N. Moore (2020) explains how the military occupation of New Orleans was technically new, but familiar to Black New Orleanians routinely terrorized by the city's infamously brutal and corrupt police department. Likewise, disaster capitalism swept the city in a way that shocked many, but proves thoroughly unsurprising when one takes into account how racial capitalism has been part of American society since its conception (Robinson, 1983). The state and corporate violence accompanying the storm was portrayed as exceptional, but a historical analysis exposes the American values at the heart of the response, of white supremacy and neoliberalism (Rodríguez, 2007). Rodríguez (2007) calls Katrina a "planned atrocity" not only because it was scientifically foreseeable and simultaneously ignored by the government, but because it was a (successful) effort to uphold the sanctity of white life in America via state-sanctioned destruction, disenfranchisement and neglect of Black New Orleanians (p. 138). To imagine abolition ecologies in DRR, building off Heynen and Ybarra's (2020) framework, is to acknowledge the systems integral to the "planned atrocity" of Katrina, to investigate the roots of those systems while prioritizing the knowledge of those with lived experience of the violence. It is to consider what actions are necessary to abolish these systems (such as white supremacy, racial capitalism, and settler colonialism) and to commit to understanding what systems are best to replace them and how they can be collectively cultivated.

In order to understand how to concretize this broadening of the field of DRR to include abolitionist ideology, policymakers and researchers should work with those who have been documenting the roots of vulnerability for decades, particularly in the fields of Black feminism and disability studies (Jacobs, 2019), as well as those on the frontlines who have lived experience of disasters. For example, those invested in broadening DRR strategy by addressing root causes of vulnerability can learn from activists demanding reparations for the legacy of anti-Blackness and slavery that the U.S. has wrought against Black people, which many have argued are needed to not only address the wrongs of the past, but also to alleviate the inequalities of the present (Movement Generation, 2017, p. 23). Other activists demand a redistribution of funding and focus away from carceral systems (like DHS, military, and prisons) towards frontline community-led solutions (detailed at the end of this section), which may have the potential to more effectively and justly address root causes of vulnerability like racial and class inequality, as well as environmental injustice.

Such demands are in line with the concept of "capabilities justice", originating in environmental justice literature, which interprets justice to require the building of people's capabilities (i.e., people's ability to meet their basic needs) (Schlosberg as cited in Méndez, 2020, p. 12). People's ability to survive a disaster, and thrive afterwards, depends substantially on the fulfillment of their basic needs: food, shelter, income, among others (Twigg, 2001). The government demonstrated during Katrina it would not meet these needs equitably, and FEMA's subsequent emphasis on an "individual culture of preparedness" demonstrates that it does not assume responsibility for meeting these needs, leaving the most vulnerable to disasters to fend for themselves (Al-Kassimi, 2019). However, considering that exclusion from dominant society

forces those on the margins to depend on each other and creative coping strategies, it logically follows that oppressed peoples "are often those who possess the most practical skills in survival situations … by nature of [their] continued existence" in societies built against them (Bahadur as cited in Pflug-Back, 2019). Accordingly, there are a multitude of examples of those on the margins providing for themselves and each other, in light of governmental neglect. New Orleans residents built capability justice following Katrina, in spite of and apart from systems of racism and capitalism functioning around them. Their organizing demonstrates the potential of abolition ecologies in disaster risk reduction. To illustrate this potential, I present examples of abolitionist praxis from New Orleans to argue what other visions of disaster recovery could look like, distinct from the individual culture of preparedness and neoliberal recovery currently in play. As part of building an abolition ecology in DRR scholarship, I describe how these practices of community ownership and collective care can disrupt the neoliberal and neocolonial governance responsible for marginalizing communities. These DRR suggestions promoting community agency and self-determination over traditional state systems may seem radical to some, but as activist-scholar Angela Davis (1984) notes, "radical simply means grasping things at the root" (p. 14).

Part of supporting community self-determination is valuing the experience and knowledge that comes from communities repeatedly on the frontlines of disasters and environmental injustice. These communities have important insight and lived experience to dictate what kind of social change is needed (Jacobs, 2019). Grassroots organizers in New Orleans predicted the heavy neoliberalism to descend on their city, what Klein would refer to as disaster capitalism, and they predicted the intersectionality in oppression along race, class, and

gender that would befall New Orleans residents (Luft, 2009, p. 507). Because they anticipated that the government would continue to abandon the majority-Black city, New Orleans organizers like former Black Panther member Malik Rahim made sure the community took care of each other, and organized the thousands of volunteers from inside and outside the city, under the motto of "solidarity, not charity" (Luft, 2009).

Rachel E. Luft (2009) explains that instead of waiting for an incompetent or tardy government response, many survivors of disasters engage in radical collective care, a practice rooted firmly in the failure of the government to provide aid and intent on forging life-affirming community bonds (Spade, 2020). There is a long legacy of radical community care amongst disenfranchised groups in America, and it is integral for many to survive the state violence that accompanies natural disasters in the U.S. Marginalized communities aid each other in ways that their politicians might only do for the press (e.g., former President Trump tossing paper towels into a crowd of Hurricane María survivors, two weeks after the storm; Cortés, 2018). African Americans have been using "cooperative economics from the moment they were forcibly brought to the Americas from Africa" (Nembhard, 2014). Between 1966 and 1982, the revolutionary Black Panther Party in Oakland implemented over 65 social programs, including their famous Free Breakfast for Children Program ("The Black Panthers", 2015); the Panthers in turn inspired the Common Ground Collective - the mutual aid organization formed (partly by former Black Panther Malik Rahim) in New Orleans after Katrina (Allen, 2018; Luft, 2009). These diverse economies go by many names - mutual aid, solidarity economy, la autogestión comunitaria - but all underline radical collective care and the deconstruction of the hegemony of capitalism (Gibson-Graham, 1996). Furthermore, all of these efforts led by frontline

communities to survive and thrive, separate from oppressive systems, can be seen as examples of abolitionist praxis, as their active resistance to state violence lays the foundation for a more liberated future.

For example, after Katrina, grocery stores, fishing boats, and gardens were decimated and food vendors, farmers, and fishers were left without resources (Zervigon, 2020). Solidarity efforts in low-income Black neighborhoods (historic food deserts) were spearheaded by the residents themselves and focused on providing each other with healthy food, long-term, by transforming vacant lots into community gardens and gathering spaces (Zervigon, 2020). Fifteen years after the storm, New Orleans food sovereignty networks are still running (Zervigon, 2020). Garden on Mars, an organic urban garden project in the Lower Ninth Ward of New Orleans, provides free gardening workshops and tools to residents (Garden on Mars, 2021). VEGGI Farmer's Cooperative is community owned and operated, and was started to support community members who had lost their jobs following the BP oil spill (VEGGI Farmers Cooperative, 2020). VEGGI aims to increase local food sovereignty and create quality and sustainable jobs, and in doing so, is creating a local solidarity economy less vulnerable to major shocks to the globalized economy, in comparison to the frequent bankruptcies and layoffs of traditional business models (Birchall & International Labor Office, 2013).

In addition to organizing for local food sovereignty, New Orleans residents have also found a way to shield their communities from the process of gentrification, seen inevitable under capitalism. Community land trusts are a way for residents to maintain land sovereignty and care for their own neighbors in the face of natural disasters, gentrification, and disaster capitalism, often more effectively than governmental disaster response (Algoed & Torrales, 2019). Land

trusts are governed by local nonprofits or municipalities and remove land from the speculative housing market to protect it (and its residents) from the "whims of global capitalism" (Williams, 2018, p. 460). When Katrina left thousands of New Orleans residents houseless, access to affordable housing became more vital than ever, but it would not be encouraged by politicians pursuing urban renewal in New Orleans (Wood, 2016). Through community organizing, Crescent City Community Land Trust, or CCCLT, arose from an urgent need to retain and preserve the unprecedented philanthropic donations and government funds coming into New Orleans after Hurricane Katrina, and redirect it towards building community wealth. Though some of this money went towards neoliberal investment and further gentrification, CCCLT was funded as a non-profit that partners with neighborhood-based groups to facilitate the creation of CLTs; these subsidized homes, collectively managed by the neighborhood and CCCLT stakeholders, maximize community autonomy and land stewardship.

By actively resisting gentrification, practicing urban farming and equitable economic practices, and by coming together to support each other post-disaster, the residents of New Orleans demonstrate the potential of abolition. New Orleans residents met some of their own and each other's most basic needs (e.g., food, shelter) when their government could not, and thus provide an important roadmap for other communities neglected by governmental structures. Additionally, rather than outsiders building capacity for resilience inside a community and structuring their own solutions, policymakers can allow a community mobilization of skills and resources and researchers can utilize participatory methodologies, permitting space for community agency and local knowledge to flourish (Kretzmann & McKnight, 1993; Jacobs, 2019).

Though transforming systems of oppression might not always be the direct strategy behind community organizing, the very survival of those designated for death by the state is a political statement in itself. The radical tradition of community care is part of a conscious refusal to accept patterns of state violence, regardless of whether the goal is avoidance or abolition of those patterns. These small-scale examples of a more just recovery from disasters not only underscore how flawed the structures currently in place are, but also give hope and shape to an abolition ecology in the field of DRR. As abolitionist Ruth Wilson Gilmore (2019) has said, "what the world will become already exists in fragments and pieces, experiments and possibilities" (p. 14).

Despite the weight of oppressive systems and meteorological disasters, some local autonomous communities are clearly unsettling, challenging, and disrupting neoliberal narratives of recovery and resilience through their commitment to their own survival on the margins. However, I do acknowledge there are limitations to this strategy. As the justice sought through abolition often manifests on a community level, a small scale, it may be difficult to imagine the widespread potential of the strategy, especially as some may see systemic oppression and inequality as inevitable. In addition, it is difficult to say with absolute certainty that an abolitionist framework of disaster response will entirely solve post-disaster structural disparities, because it has yet to be implemented fully. Moreover, abolitionist strategy is neither easy, nor fast, and in the meantime, catastrophic disasters, and disparities, will continue to occur. Amidst these challenges, Black feminist adrienne maree brown (2017) explains that one can only trust in the human ability to survive and transform systems of oppression, and understand that small-scale practices set the pattern for systems (p. 53). Disaster scholars and practitioners questioning

how it is possible to step out of existing power structures, to build just systems under a unified system of global white supremacy, must begin to learn from communities doing it themselves.

Conclusion

By arguing for the potential of abolition-based frameworks in understanding and improving disaster outcomes, this thesis has demonstrated how those in the field of DRR can more meaningfully address manufactured vulnerability, taking their lead from communities' lived experience and organizing work. The case study of Katrina clearly demonstrated the failures of reform-based DRR policy to that point, the review of academic responses showcased the racial and neoliberal narratives playing into those state failures, and the work of New Orleans organizers showcased in the last section suggests a path forward for scholars and practitioners of DRR that does not rely on band-aid solutions.

Resilience narratives, for example, are a temporary treatment for the structural inequities that prompt vulnerability, but community-managed resilient spaces that resist structural inequity "can become springboards for more fundamental transformation" and create long-term structural change (DeVerteuil & Golubchikov, 2016). Long-term structural change can seem radical and threatening to those at the top who benefit from structural inequality, and thus structural change is unlikely to be embraced by state actors. However, if disaster practitioners are invested in challenging deep-rooted systemic inequality, radical proposals are unavoidable. Broad resistance to hyper-individualistic and neoliberal approaches to community resilience is necessary in order to end the state and economic violence that disproportionately impacts historically marginalized communities. The small-scale abolitionist praxis outlined above holds some of the keys to

creating a larger movement of resistance, and to creating more just recoveries from disasters.

Lena Palacios (2016) explains that it is necessary to embrace the tensions between different liberation movements, and specifically to refuse to erase the intersections and differences, in order to develop a variety of effective strategies against state violence (p. 37). I relegated much of the intersectionality of people's lived experiences during Katrina to the footnotes of this thesis in an effort to stay focused on the overarching systems at work, but future work should critically examine and focus on how collaborations across liberation movements from different and intersecting communities, such as Afro-Indigenous peoples, are central to moving forward in DRR. This collaboration can highlight intersecting oppressions and liberatory strategies in ways that a single-minded focus cannot. The Combahee River Collective (1977) frames it well when they explain that "if Black women were free, it would mean that everyone else would have to be free since our freedom would necessitate the destruction of all the systems of oppression". Locating different intersections that disaster scholarship has previously ignored, and holding their tensions despite the contradictions, can lead those invested in DRR to a liberatory practice that refuses to find anyone disposable.

Accordingly, future disaster scholarship in this area should also analyze how additional systems of oppression, such as homophobia, transphobia, ableism, policing, and settler colonialism, specifically contribute to "unnatural" disasters. For example, C. Richard King (2008) notes especially how Indigenous nations on the Gulf were largely ignored by mainstream media post-Katrina. Many Indigenous nations impacted by the violence of settler colonialism call for a return of their ancestral homelands (Pflug-Back, 2019), which would also have the potential to reduce the severity and magnitude of disasters worsened by climate change, one of

the root issues of DRR.[21] Investigating the interconnected nature of oppressions in our society will avoid an ineffective and false separation of issues, and create a more holistic understanding of the steps forward for the field. This work and subsequent policymaking should be done in collaboration with the specific peoples of focus, in order to fully understand the issues at hand.

One way this research may spur future discussions in the field is via an international application of the concept. Abolitionist strategy is useful to more than just hurricanes and more than just the U.S., especially considering organizing for new worlds, beyond and in spite of systemic oppressions, is happening globally already (Laville, 2010). Making the connections between typhoons, droughts, wildfires, and global systems of oppression could enable further organizing and improvements to be made. To begin a global analysis of abolition ecologies in DRR, U.S.-based scholars should take into account the international ramifications of U.S. contributions to disasters specifically in the Global South, via U.S. military, corporate, and consumer emissions. Scholars might also investigate how an open borders policy might befit the United States, as climate change is likely to cause massive houselessness, displacement, and migration worldwide (Rising Tide North America, 2019).

In sum, the potential to make radical change is made concrete during crises, as documented by Klein (2007). Scholars of queer theory have theorized how disastrous situations can "open up new and liberatory ways of being and becoming" at a societal level (Ong, 2017, p. 658). After Hurricane María in Puerto Rico, "in the logics of blackouts, scarcity, and social uncertainty, the logics of shame and homophobia fell more and more to the wayside" and the

[21] The Intergovernmental Panel on Climate Change suggests that Indigenous land practices have the potential to benefit climate change adaptation and mitigation (Shukla et al., 2019, p. 27).

queer scene actually thrived (Bonilla, 2020, p. 166). In these ways, building an abolition ecology in the field of disaster risk reduction is possible, even amidst frequent disasters of increasing magnitude. The causes of disproportionate vulnerability to disaster can be addressed, once acknowledged. Most importantly, this work to unearth and transform systems of oppression must be supported by DRR scholars and practitioners, and led by communities on the frontlines of disaster.

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