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Life in Mossville, Louisiana: Policy Implications of Toxic Waste Exposure and Environmental Racism

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LIFE IN MOSSVILLE, LOUISIANA:
POLICY IMPLICATIONS OF TOXIC WASTE EXPOSURE AND ENVIRONMENTAL RACISM

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Abstract

Environmental damage disproportionately affects communities of color. Understanding how environmental racism uniquely affects marginalized communities is crucial to effectively develop public policies that will address the systematic racism that is rooted in many existing policies and practices. The town of Mossville, Louisiana provides a case study of a Black town that experienced devastating environmental pollution as well as displacement from the oil and petrochemical industries in the region (Rogers, 2015), with few residents still in the area. This thesis presents a qualitative study utilizing peer-reviewed literature, secondary sources, and life narratives of Mossville residents. These oral histories serve to amplify the voices of the former and present Mossville residents who shared their experiences living there while the oil and chemical industries slowly polluted the town and later bought people's homes. This research adds to the existing body of literature on Mossville by emphasizing the importance Black communities play in social development and how displacing these communities damages decades of culture, family, and safety. This research illustrates how the "slow violence" of institutional racism allows for ongoing racial injustices, including environmental racism in South Louisiana, to occur. An important implication for policy is that Black communities need to be represented and involved in public policy making to make progressive anti-racist public policies that combat environmental racism.

Chapter 1: Introduction

Environmental justice is a political and social framework that considers how the traditional roles of social justice, such as race and socioeconomic status, interact with individuals' work, school, social, and home environments (Williamson et al., 2020). The Principles of Environmental Justice were developed in 1991 at the First National People of Color Environmental Leadership Summit held in Washington DC as a response to the discrediting of marginalized citizen's environmental concerns (Agyeman, 2002). These principles emphasize the importance of community engagement and inclusion when addressing environmental inequities. These inequities include racial disparities in healthy living environments due to disproportionate exposure to air, water, and land pollution. The environmental justice framework recognizes environmental health disparities and how these disparities result from inappropriate, inequitable resource distributions and policy decisions. The actors who make decisions about distributions and policies often ignore marginalized groups, which demonstrates the need for sustained community activism and pressure (Williamson et al., 2020).

Policy makers usually address environmental injustice only after organized grassroots groups identify social and health effects in affected communities. These grass roots groups aim to address broader environmental threats that cause the social and health problems to marginalized communities. Citizen activism, access to financial and logistical resources, understanding of community history, and political advocacy are all crucial to creating effective coalitions and making changes in communities affected by environmental injustice (Williamson et al., 2020).

This thesis focuses on the lived experiences, as documented in oral history interviews, of a small Black town of about 500 residents (Rogers, 2015), called Mossville, Louisiana. Black people in Louisiana have historically been excluded not only from full participation in electoral politics but also from participation on environmental groups, boards, and commissions (Waldron-Moore, McKinney, and Brown, 2007). This exclusion is inequitable, with 80% of Black people in Louisiana living within three miles of a facility that produces toxic waste, while making up only 34% of Louisiana's population (Cahill-Jackson, 2012). Mossville, Louisiana in southwest Louisiana, located in Calcasieu Parish, is one example of the many exploited Black communities in Louisiana and the southern United States that has had a long history of experiencing environmental dimensions of systemic racism. Mossville residents have reported that the industrial plants located in and within close proximity to their town have caused the adverse health problems they have experienced for decades (Cahill-Jackson, 2012).

Prior research has been conducted by environmental justice scholars on chemical exposure and the health effects of living near industrial plants in both Mossville and the greater area of Calcasieu Parish. The health-related literature published reflects the large focus on the health effects of environmental racism by sociologists and environmental justice scholars. Existing published works by Robert Bullard (2020), Dorceta Taylor (2014), Carl Zimring (2015), Luke Cole (2001), and Shelia Foster (2001) highlight the social perspectives of other southern American towns that have experienced environmental racism. While Mossville has received national press attention in recent years due to lawsuits and a high-profile visit by the EPA Administrator in November 2021, peer-reviewed literature remains limited on the lived experiences of the residents of Mossville and how industries built in Mossville affected people

from a social perspective. It is critical for researchers and policy makers to understand more than the health effects of environmental racism to comprehend why policies need to change to protect minoritized communities. By analyzing the life narratives of former residents of Mossville, researchers and policy makers can begin to comprehend why this town was important, and how understanding the lived experiences of its residents can help protect other Black communities in south Louisiana and elsewhere from the damage caused by industrial facilities.

The data used in this study focus on peer-reviewed articles about Mossville and a set of oral history interviews of former residents. These interviews were conducted and recorded by Louisiana State University researchers in Baton Rouge, Louisiana between 2015-2017 as a part of the Mossville History Project curated by Jennifer Cramer, the director of Louisiana State University's T. Harry Williams Center for Oral History. The Mossville History Project was conducted in partnership with the Imperial Calcasieu Museum and funded by a grant provided by Sasol, a chemical company that built a plant in Mossville and bought many of the residents' property. This data will be used to answer the research question, how did and does environmental racism impact the lived experiences of Black residents in Mossville, Louisiana? The data analyzed does not fully describe what it is like to live with toxic pollution, as every individual's experience is unique, with different factors potentially increasing or decreasing their risks for health problems and risk perception. Nonetheless, this analysis provides compelling examples of the discriminatory experiences people who live in similarly contaminated towns may share with individuals in the Mossville community, and illuminates areas of racism that can be countered with more equitable policy making. This paper adds to

the existing body of research on the social impacts of environmental racism in southern United States communities.

The next chapter will review existing literature on environmental racism from 2000-2020 and literature on Mossville. Next the 62 interview segments with Mossville residents will be analyzed. These interviews create a detailed account of what life in Mossville, Louisiana was like before, during, and after it was polluted and bought out by corporate polluters, and with the goal of informing future policy makers of the importance of facilitating more just policies concerning the petrochemical industry. Finally, I will conclude with a discussion of the implications for future research on environmental racism in Mossville and other towns facing environmental racism.

Chapter 2: Literature Review

Environmental Justice

Environmental Justice History

Since the early 1970s, environmental movements have been most associated with support by upper and middle-class white Americans. These supporters typically are above average in their educational attainment and have greater access to economic resources. As the environmental movement has broadened to include greater racial and socioeconomic diversity, there has been growing awareness that minoritized groups are disproportionately exposed to environmental stressors such as localized water pollution, air pollution, noise pollution, toxic chemical leaks, and litter and solid waste pollution (Bullard, 2020).

Sociological research on Black communities has often focused on issues such as crime, drugs, and unemployment to a greater degree than environmental justice. More research is needed on how Black communities respond to environmental threats and stressors. Studies have demonstrated that people in toxic communities often respond to the issue through either problem-focused coping or emotion-focused coping. Further, whether or not individuals take direct action is influenced by whether they perceive the problem as something they can do anything about, which relates to many variables (Bullard, 2020).

Environmental stressors have been disproportionately imposed upon American Black communities since the era of enslavement, and were reinforced by policies and practices after the Civil War, urbanization, and industrialization (Zimring, 2015). Racist policies and practices in the United States are systemic, perpetuating problems that lead to additional inequalities. Around 1890, white-owned companies began labeling their products, and by association, their

white users as “clean” and “pure.” This labeling was part of creating a new political order that was intended to keep Black people disenfranchised despite federal laws intended to enable Black men to vote and own property. Ideals of racial purity can be traced back to white supremacists such the Ku Klux Klan. Minoritized races and immigrants, the people responsible for cleaning up waste and other sanitary jobs, were labeled as “dirty” in an attempt to establish racial superiority and to force people of color to work in sanitation positions. White academics claimed Black people were not as intelligent as white people and interracial marriage was banned to prevent darker skinned people from polluting the white race (Zimring, 2015). These racist ideologies continued in the 1920s when, with the surge of urbanization, waste management needs grew. Waste from city streets was moved from white neighborhoods, where people with white privilege and influence fought for sanitary conditions in their neighborhoods, to urban dumps, where disenfranchised Black communities bore the burden of living near waste disposal facilities (Zimring, 2015).

Residential racial segregation increased drastically between 1915 and 1960. A distinct example of this segregation was in the Black Belt of Chicago. White residents near the business district moved into newer neighborhoods and Black and Hispanic families moved into older neighborhoods that were more economically accessible. The Black neighborhoods were not kept as clean as the white neighborhoods because the local government prioritized waste management in white neighborhoods (Zimring, 2015). Residential segregation and redlining continued to rise throughout the first half of the twentieth century and white people encouraged each other to purchase real estate in neighborhoods with residents of the same

race and social status as them. White people began to move away from cities and suburbanization grew (Zimring, 2015).

In addition to the environmental threats and residential segregation that led to urban dumps in predominantly Black neighborhoods, people of color were often limited to jobs that posed dangerous environmental threats, such as working in junk shops and junk yards handling hazardous waste. These jobs were accessible because zoning regulations and laws to keep waste away from neighborhoods were only applied to white neighborhoods (Zimring, 2015).

The Environmental Justice Framework

The importance of just sustainability and environmental justice as a framework came to light in an especially strong, public way after the 1992 Rio Earth Summit which emphasized the importance of a high quality of life for all communities. Julian Agyeman states that his just sustainability framework requires the *social* needs of the community be met in addition to economic welfare in order to achieve a sustainable community (Agyeman, Bullard, and Evans, 2002).

The American environmental justice movement began to advance during the 1980s with southern Black communities protesting toxic waste pollution in their towns. This upsurge has continued, but mechanisms of disenfranchisement and related issues still limit members of communities facing environmental racism. Published studies featuring quantitative data collection, such as census data and mapping toxic waste sites, demonstrates that environmental racism continues to be a major problem in the United States. While spatial analysis has been important in providing evidence of environmental racism, qualitative data is also necessary to highlight the magnitude of environmental racism in social development. The

environmental justice movement has been criticized for failing to capture the broader nuances that are a part of social justice such as proactive and sustainable policy making and access to green spaces (Agyeman, Schlosberg, Craven, and Matthews, 2016). Additionally, the environmental justice movement largely focuses on toxic pollutants, failing to encapsulate the multitude of threats marginalized communities face as a result of environmental racism, and the intertwined social threats (Agyeman et al., 2002).

States with power inequalities seen through voter participation and education levels also have less stringent environmental policies that result in high levels of environmental stress and even premature deaths. Under the just sustainability framework, addressing power inequities is equally important as eliminating environmental stressors. This framework asserts that these social inequities are inseparable from environmental inequities (Agyeman et al., 2002). Additionally, environmental movements often encourage individuals to take responsibility for their living environments and organize grassroots groups to maintain a healthy living environment, instead of encouraging public officials and leaders to develop these groups. However, movements focused on individualism fail to account for Black communities and do not address the issue of public distrust in the government among Black communities or how political decisions cause environmental issues (Clarke and Ageyman, 2011). Sustainable development and environmental protection are often viewed as a form of stewardship in which the responsibility of resolving environmental issues falls on individuals. While stewardship and collaboration are important parts of environmental protection, considering communities affected by environmental racism, and understanding the stories of these communities, allows researchers to examine the root causes of environmental racism. Prioritizing social inclusion

allows for the delivery of sustainable development and policy making through a focus on human rights (Clarke and Ageyman, 2011).

The environmental justice movement remains subject to change in the context of local politics and community priorities. Every community has a unique story and all voices and concerns need to be understood to analyze a community through an environmental justice lens. As the environmental justice movement is expanding nationally and globally, it is important to diversify representation within the movement and highlight the lived experiences of those who have been impacted and disenfranchised (Agyeman et al., 2016).

Fighting for Environmental Justice

Black communities have been fighting for justice for decades. Black activism during the Civil Rights era influenced federal policy changes seen in the Supreme Court ruling of *Brown v. Board of Education* (overturning the "separate but equal" doctrine of *Plessy v. Ferguson*), the Civil Rights Act of 1964, and the Voting Rights Act of 1965. Dr. Martin Luther King fought for distributive justice and encouraged civil rights activists to work with labor activists to fight exploitative and unsafe working environments (Zimring, 2015).

One example of Black people unsuccessfully fighting for safe environmental working conditions took place in the 1960s, involving the Public Works Department in Memphis, Tennessee. Memphis' Mayor Henry Leob, a white supremacist, claimed to be a sanitation expert and had a so-called open-door policy for employees who were concerned about unsafe working conditions. In reality, his open-door hours were limited, and he required that sanitation workers be freshly showered and wearing laundered clothes before coming to his office, a policy that deliberately made asking for workplace changes difficult. To save money,

Leob also sent Black, but not white, workers home when it rained, thereby losing pay, claiming that he was protecting them from unsafe working conditions (Zimring, 2015). As a result of the unfair treatment, garbage collector T. O. Jones unionized the Public Works employees who protested their unfair and unsafe working conditions, with Martin Luther King Jr. becoming involved in fighting for their rights (Zimring, 2015). This strike is a crucial part of environmental justice history, demanding recognition that non-white workers were the ones stuck with the dirty work keeping cities clean, despite the lack of fair or safe working conditions.

Given Louisiana's history of systemic racism, there are many historical examples of how these unequal conditions affect the communities who live with it every day and how those communities fight for justice. For example, in 1996, Shintech Inc. planned to build an industrial plant in the predominately Black city of Covet, Louisiana in St. James Parish. This plant would pump over three million gallons of waste water into the Mississippi River daily and produce 611,700 tons of toxic air pollutants annually. In response to the plants that were going to be built, grassroots organizations made their concerns clear to local politicians. After multiple groups like the Louisiana Environmental Action Network became involved, the protests gained national attention. Under the EPA's environmental justice initiative, Shintech was blocked by building the plants under a Clean Air Act violation (Hines, 2001). Covet had a story similar to Mossville with residents coming together to fight industrial plants and demonstrating the importance of community action in environmental justice. Understanding communities, their suffering, their fighting, and their risk perceptions brings greater insight to the experiences of Black communities in Louisiana facing environmental racism.

The Impact of Environmental Racism

The Impact of Environmental Racism on Public Health

Environmental issues in Black communities are often framed in peer-reviewed articles as political issues that affect public health. While protecting public health is a critical part of creating environmental policies, equity is often not on the public policy agenda and white environmentalists have often adopted a “not in my backyard” attitude, focusing on eliminating pollution from their area, but paying little attention to the Black communities where the environmental damage is often moved (Bullard, 2020). Less stringent environmental policies and higher rates of environmental stressors are more prevalent in areas with social inequities and inequitable power distribution and areas with high marginalized populations are exposed to higher levels of environmental pollutants than other areas in the United States (Bullard, 2020). Companies choose areas to build their facilities based on factors such as low cost, transportation access, cost of labor and materials, as well as the likely lack of opposition and pressure from residents.

The consequences of choosing land based on low costs is that industrial facilities are disproportionately built in areas that have already been subjected to systemic racism. Even when corporations do not intend to discriminate against communities based on race (Taylor, 2014) existing inequitable structural arrangements tend to keep costs lower in marginalized communities. Plants are often built in between towns near jurisdictional boundaries to avoid paying higher fees for potential environmental hazard compensation or other pollution fees. Once one hazardous waste facility has been constructed, more are likely to be built within the area and this clustering occurs at an 18% higher rate in communities of color than in white

communities, where having one toxic facility does not increase the likelihood of another being built as much as in neighborhood encountering racism (Taylor, 2014). Moreover, when these types of facilities are constructed, the white people near the facilities tend to move away. Hazardous facilities drive down property values in nearby residential areas, perpetuating the systemic oppression by causing the housing to be affordable to the economically oppressed, usually poor marginalized families. As more people of color move into neighborhoods, white people tend to move further away. This occurrence is called “white flight.” When property values within close proximity to hazard waste sites or plants decrease, a spillover effect occurs and property values surrounding the sites also decrease (Taylor, 2014).

Another contributing factor to minoritized communities facing disproportionate rates of environmental toxins is that companies tend to seek communities that are unlikely to oppose them. Characteristics of communities often targeted are those that are low income, lack a history of organizing on behalf of social issues, have lower education rates, and lack political power - all of which are results of systemic racism (Taylor, 2014). A study published in the *National Law Journal* found that legal penalties imposed on hazardous waste sites in white areas were around 500 percent higher in white communities than communities that were predominately people of color (Cole and Foster, 2001).

Numerous other examples of environmental racism support the need for significant and far-reaching policy changes. For instance, in 1982, the state of North Carolina dumped thousands of yards of soil that were contaminated with PCBs in a poor rural county that consisted of 84% Black people, the highest percentage of Black people in the entire state

(Zimring, 2015). Black communities have been experiencing the health effects of environmental racism for decades, and these health risks shape their social wellbeing as well.

Social Outcomes of Environmental Racism

When communities are affected by an environmental hazard, the residents face a predicament: are they willing and able to move out or are they going to stay in their community with affordable housing while their health is at risk? For example, Hyde Park was a Black neighborhood in Augusta, Georgia that was impacted by environmental toxins and was studied by Melissa Checker, an environmental justice researcher and professor at Queens College. She found that residents stayed and new people settled in the area because Black families could own homes, have access to land to grow gardens and raise livestock, and safely walk around and ride the bus without fearing the violence of racism. These experiences were not accessible to Black people in other nearby areas, which made living in Hyde Park desirable despite health threats (Taylor, 2014).

Risk Perception

Risk perception refers to the judgements individuals and groups of people make based on the possible consequences of specific hazards such as environmental health threats (Janmaimool and Watanabe, 2014), and how individuals weigh risks when determining whether those risks are worth living with (Paek and Hove, 2017). Environmental risks that are present in residential areas near industrial facilities include but are not limited to soil pollution, water pollution, air pollution, and hazardous substances that can cause cancer and other diseases. While government leaders and industrial experts may understand the risks caused by industrial facilities, these risks are often not appropriately communicated to local lay people, who are

often left out of policy decisions regarding industrial facilities. The differences in understanding the health and environmental risks of industrial facilities impacts risk-related decision making and risk perceptions. Additionally, risk perceptions are formed by social factors, moral values, probability judgments, the severity of the risks, and how in control of a situation an individual perceives they are (Janmaimool and Watanabe, 2014). Collective experiences, social determinants and uncertainties, and the benefits associated with taking risks are other important factors in determining one's risk perception and decision making. How these risks are communicated from experts to lay people plays an important role in the latter's decision making process (Janmaimool and Watanabe, 2014).

Risk perception plays a significant role in the choices individuals make when confronted with potentially harmful circumstances (Paek and Hove, 2017). Another important aspect of environmental risk perception regards consideration of economic tradeoffs. Political and community leaders often endorse industrial facilities because of the ostensible economic gains for the community (Bullard, 2020). Bullard (2020) cites a survey that demonstrated 56.3% of community members were willing to accept the health risks that an industrial facility would expose them to if it meant better jobs. In reality, local job availability does not always increase as much as promised once a facility is built and opened. Not all industrial facilities are labor intensive, resulting in few job opportunities for residents (Bullard, 2020).

Slow Violence

"Slow violence" is a term coined by Rob Nixon, a professor of Humanities and the Environment at Princeton University (Nixon, 2011). This term refers to problems that cause harm gradually over time, often as a result of structural inequities such as racism, sexism, and

classism (Davies, 2019). Slow violence is neither direct nor immediate and fits into the normalization of suffering experienced by marginalized groups. Veiled by institutions that normalize harms to marginalized communities, slow violence is often not recognized as violence by people outside of these marginalized communities, who may not perceive or acknowledge the suffering caused by structures like racism (Nixon, 2011).

Slow violence would not occur in the absence of social inequities, where oppressed communities who lack resources become the victims of this type of violence. When describing slow violence, Professor Thom Davies, who researches environmental justice and toxic geographies, references Freetown, Louisiana. Freetown has experienced environmental racism from the oil industry, and the town's experiences with toxic pollution are similar to Mossville and other towns in Louisiana, with residents experiencing health problems after being exposed to toxins. Freetown has had no endpoint to the environmental pollution that has exposed locals to health risks, but instead has been exposed to prolonged pollution. Because of Louisiana's history of racially motivated violence, slavery, and systemic racism, poor, Black communities often provide the "path of least resistance" for petrochemical corporations seeking to build industrial facilities (Davies, 2019, p. 8).

Another contributing factor to slow violence is that health problems caused by toxic pollution are often hidden. When individuals receive a cancer diagnosis, they may never have the cause of their illness proven or identified by a healthcare provider. The slow exposure and indirectness of the causes of cancer can be difficult to understand and accept. This understanding requires education on the processes and effects of toxic pollution over prolonged periods of time (Davies, 2019). Davies suggests that observing toxic communities and

the lived experience of residents in these communities can lead to a greater understanding of how slow violence can be "disguised from the people it impacts" (Davies, 2019).

What policymakers need to learn more from the literature focused on environmental justice centers upon the lived experiences of members of Black communities that have suffered from environmental racism. Identity, power, and agency are critical keys to the just sustainability framework (Clarke and Ageyman, 2011), and analyzing qualitative data from Black communities is imperative to expand the literature on anti-racist environmental policymaking. While quantitative data on pollution and cancer statistics demonstrates the inequities, it does not capture what life was like for Black people before, during, and after their communities were destroyed. Understanding the lived histories of communities exposed to environmental degradation is crucial to understanding larger social inequalities and how these inequalities lead to and perpetuate environmental racism and slow violence (Agyeman et al., 2010).

Research on Mossville and Related Areas

Louisiana has a history of small Black, unincorporated towns being the targets of environmental racism. Wallace is a small town outside of New Orleans by the Mississippi River that is 95% Black. With no formal government, Wallace has relied on their St. John the Baptist Parish Council to lead the community because the white parish officials failed them and approved a plant to be built in their community in 1992. Wallace citizens developed a grassroots movement and succeeded in preventing the plant from being built, demonstrating the potential and need for citizens' input to stop systemic environmental racism (Bullard, 2020). Despite the success of Wallace residents, many other small Black towns in Louisiana have had a

different fate. Morrisonville was a small town founded by formerly enslaved people who passed on generational Black wealth. This town was displaced by Dow Chemical in the 1960s. Reveilletown, Sunrise, (Bullard, 2020) and Mossville were Louisiana towns with similar fates. Unfortunately, the poverty experienced by rural community members makes moving out of these toxic communities difficult if not impossible (Taylor, 2014). Through studying towns like these, policy makers can better understand why people continue to live in toxic communities, why these communities are important, and how and why they need to be protected.

Mossville serves as a representation of this larger problem, and was chosen because of the additional availability of oral history interviews with former members of the community. In order to take a more comprehensive review of research on Mossville, a literature search was conducted to identify peer-reviewed journal articles about the health and social implications of people living in Mossville and Calcasieu Parish, Louisiana. Google Scholar, Web of Science, and ScienceDirect were searched. The key terms and phrases included in the search strategy were "Mossville Louisiana," "Cancer Alley," an area of south Louisiana along the Mississippi River nick-named for the high cancer incidences locals believe are caused by petrochemical plants, "environmental racism Louisiana," and "Calcasieu Parish." The search did not have a publication date criteria.

Inclusion and Exclusion Criteria for Peer-Reviewed Literature on Mossville

Seven peer-reviewed journal articles and one government document met the criteria of being focused on the health and social implications of living in Mossville and Calcasieu Parish. Because of the limited number of journal articles focusing on Mossville and Calcasieu Parish, additional articles were included that focused on the social implications of living in similar

Louisiana communities. To be included, these articles had to focus on towns that also experienced environmental injustice due to nearby industrial plants and facilities. Expanding the search to include similar areas led to the discovery of three more journal articles. While Mossville did not have a newspaper with which to triangulate finds from the oral history interviews, follow-up research should also include coverage by journalists from state and national media sources. Articles that focused solely on environmental issues such as coastal erosion in Mossville and Calcasieu Parish were excluded.

Table 1 indicates the focus of each article used in this literature review. The categories include cancer incidences, polychlorinated biphenyls (PCBs) contamination, dioxin contamination, metal contamination, volatile organic compounds (VOCs) contamination, and social implications. Three journal articles included references to cancer incidences, three articles included PCBs contamination, six articles included dioxin contamination, two articles included metal contamination, three articles included VOCs contamination, and three articles included the social implications of living near industrial plants in Louisiana.

Table 1: *Effects of Living Near Industrial Plants in Louisiana Found in Peer-Reviewed Studies*

Authors	Cancer Incidences	PCBs Contamination	Dioxin Contamination	Metal Contamination	VOCs Contamination	Social Implications
Bussan et al., 2019				x		
Cahill-Jackson, 2012			x			
Costner, 2000		x	x			
Hines, 2001						x
Hines, 2015	x		x		x	
Johnson, 2019			x			
Louisiana Department of Health and Hospitals, 2013	x	x	x	x	x	
Roberts, 2011			x			
Singer, 2011	x					x
Uddin et al., 2014					x	
Waldron-Moore et al., 2007						x
Wong et al., 2015		x				

The main findings of these studies demonstrate the problems of environmental racism in Mossville, Louisiana and similar areas. The health consequences of toxic pollution exposure range from cancer growth to behavioral disabilities (Singer, 2011). The literature reviewed examined the social implications of living in toxic environments, including different understandings and perceptions of risk as well as fights for justice and building grassroots organizations. Living in areas like Mossville affects people physically as well as socially, and

understanding these communities from many perspectives, including those of the community members, revealed a great need for policy change and reform at state and national levels to address environmental racism.

The Health Effects of Living Near Plants Found in Peer-Reviewed Studies

The negative health effects of living near toxic pollution in Mossville have been documented for over two decades. In 1997, a law firm in Lake Charles, Louisiana planning a class action lawsuit collected blood samples from Mossville residents to provide proof of high dioxin levels. The residents of Mossville were reporting high illness rates and health problems they believed to be associated with toxic emissions and pollution from nearby industrial plants. The blood sample results were sent to the Environmental Protection Agency (EPA) which then asked the Agency for Toxic Substances and Disease Registry (ATSDR) to launch an investigation (Hines, 2015). The ATSDR began conducting an exposure investigation in Mossville in 1998 (Cahill-Jackson, 2012) using blood samples from twenty-eight residents from ages 20-83.

The results demonstrated that Mossville residents carried polychlorinated biphenyls (PCBs) in their blood “at an average total concentration 2.8 times higher than the average levels found in the comparison group” (Costner, 2000). Additionally, Mossville residents carried “an average concentration of dioxins that is more than three times higher than the average concentration of the ‘background’ level represented by ASTDR’s comparison group” (Costner, 2000). Soil samples in Mossville showed dioxin levels seventeen times higher than the control group. Test results also found that mothers had elevated levels of dioxins and PCBs in their breastmilk as well as their bloodwork (Costner, 2000). After the ATSDR conducted this study,

the government did not offer any form of assistance such as waste clean-up or other pollution control efforts to the residents of Mossville who were clearly suffering (Cahill-Jackson, 2012).

In 2001, the ATSDR conducted a follow-up study to determine potential sources of dioxin exposure. Blood tests were conducted on twenty-two residents over half of whom had participated in the first study. Produce, dust, and soil were also tested for dioxin. The study was not published until 2006, and the ATSDR did not attribute the dioxin contamination to any specific industries, stating that, "dioxin is found everywhere in the environment" (2006, as cited in Cahill-Jackson, 2012) and did not make any statements about the health effects of being exposed to dioxin. (Cahill-Jackson, 2012). In 2002, the ATSDR conducted a third and final study that tested dioxin levels in people's blood throughout Calcasieu Parish where Mossville is located. Compared to the rest of the parish, Mossville residents had the highest dioxin levels in their blood samples and the soil contamination did not extend to other towns in the parish, demonstrating that there was a local cause of the dioxin contamination (Cahill-Jackson, 2012).

Mossville Environmental Action Now (MEAN) is a nonprofit organization that was formally incorporated in 1999. Before this incorporation, Mossville residents began organizing to address the illnesses town members were suffering from because of industrial emissions. Since its founding, MEAN has performed air tests throughout Calcasieu Parish and provided data for an influential report, *Industrial Sources of Dioxin.* MEAN petitioned the Inter-American Commission on Human Rights in 2005 as an effort to protect Mossville from the human rights violations of health and racial equality (Mossville Environmental Action Now). A complete timeline of MEAN's work and resources about the petrochemical industry and Sasol can be found on their website.

After the ATSDR studies, Mossville Environmental Action Now members compared the study results to EPA standards for clean-up. They discovered that over half of the blood samples in the study exceeded the EPA standards for dioxin by two to two hundred-thirty times. MEAN was also able to link a specific dioxin compound found in blood samples to a compound that was emitted by a nearby plant – something the ATSDR failed to accomplish (Cahill-Jackson, 2012).

Following the ATSDR studies, a 2010 EPA site investigation was reviewed by the Louisiana Department of Health and Hospitals. Like the ATSDR, the Louisiana government neglected the Mossville residents' health complaints. Their review of the EPA data stated that PCB, VOC, and dioxin levels found in water and soil were not high enough to cause harm to humans. This review even went so far as to state that dioxin levels were non-detectable in the water and soil samples (Louisiana, 2013), despite the data collected by the ATSDR. The review concluded by suggesting that the only environmental risk factor in Mossville was lead poisoning. The suggested solution was to put grass or mulch over lead-contaminated soil to protect children from potential lead exposure. The review contained no other suggestions to deal with other possible environmental threats (Louisiana, 2013).

A 2013 study published in the *Journal of Exposure Science and Environmental Epidemiology* compared VOC blood levels within Calcasieu Parish, Lafayette Parish, and the national average. Lafayette Parish was selected as a control group. Calcasieu Parish has higher point and nonpoint VOC emissions than Lafayette Parish. Despite this exposure difference, the blood samples taken of residents in Calcasieu Parish were extremely low and VOC levels were not detected (Uddin et al., 2013).

Nearby Calcasieu Parish, Ascension Parish residents reported a variety of health problems in a set of interviews conducted with Black residents, most of whom had lived their entire lives in Ascension Parish. A man in his fifties stated that he had poor health and felt weak. He also reported that his daughter experienced throat-related health problems and was in and out of the hospital. A woman in her forties reported breathing and heart difficulties as well as two previous miscarriages. A couple of residents reported their children's skin peeling and falling off in their bath water as well as children experiencing behavioral disorders. One person warned the interviewer, anthropologist Merrill Singer, to buy bottled water for drinking and bathing because the tap water was contaminated (Singer, 2011).

Similar to the 2013 study, a 2015 study approved by the U.S. Centers for Disease Control and Prevention compared PCBs in blood levels of residents within Calcasieu Parish, Lafayette Parish, and the national average. Again, Lafayette Parish was used as a control group. This study found that neither Calcasieu Parish nor Lafayette Parish residents had higher levels of PCB concentrations in their blood than the rest of the country. However, the PCB levels of Black people in the study were higher than white people in both Calcasieu and Lafayette Parish (Wong, Uddin, Turner, Ragin, and Dearwent, 2015).

In 2018, a study was conducted in Calcasieu Parish by McNeese State University researchers to analyze metals found in soil samples collected from PVC pipes near industrial facilities. Metal contamination affects water quality for humans and wildlife (Bussan, Harris, and Dourvis, 2019) and can cause health problems such as neurodevelopmental issues (Needham et al., 2005). This study found that there were higher levels of iron, magnesium, nickel, lead, and zirconium in Calcasieu Parish's soil than the national average which could

contribute to the health problems people endured in Calcasieu Parish (Bussan, Harris, and Douvris, 2019).

With dioxin spearing to be present in high enough quantities to poison water, fish, soil, and food it may seem obvious that there could be a link to the community's health problems (Johnson, 2019). The health effects of dioxin contamination include cancer, reproductive system issues, immune system impairment, hormonal disruptions, and neuro-behavioral development impairment. Dioxin is also bio-accumulative and can be passed onto babies through breastmilk (Cahill-Jackson, 2012). Resident Dorothy Felix stated, "These chemicals are killing us. They will destroy Mossville if nothing happens" (Cahill-Jackson, 2012). The health disparities caused by living in Mossville might appear obvious based on some of the studies, but community members have been unsuccessful in obtaining government intervention or assistance.

The Social Effects of Living Near Plants Found in Peer-Reviewed Studies

Beginning in the 1990s, community members in Mossville began documenting the effects of living near plants and MEAN was organized as a grassroots organization by local community members who wanted to address the health problems caused by industrial emissions (Mossville Environmental Action Now). Residents were adamant that the EPA's environmental regulations were being unequally enforced, resulting in their community not being remediated. This unequal enforcement would also explain why the EPA failed to modify the facilities' air emissions and wastewater discharge permits in the area to better protect the residents from pollution (Cahill-Jackson, 2012). Community members were desperate to find policies to protect them. Because the equal protection clause of the Fourteenth Amendment to

the United States Constitution only protects people from intentional acts of discrimination, residents were unable to prove that they were victims of intentional discrimination from the polluting industries. The facilities in and around Mossville also all had legal permits to operate, therefore, they were not violating any environmental laws (Hines, 2015).

Eventually, residents sought help from a non-profit law firm to seek justice on the grounds that their civil rights were being violated. Mossville gained attention throughout the state of Louisiana and Texas, with the help of Advocates for Environmental Human Rights, an organization founded in New Orleans that provides legal services for those experiencing environmental injustice. MEAN, the Advocates for Environmental Human Rights, researchers at the University of Texas, and Subra Company, a chemical laboratory in New Iberia, Louisiana, conducted a study on the health effects of 100 Mossville residents. (Hines, 2015) In 2008, the Advocates for Environmental Human Rights represented Mossville and filed a petition with the Inter-American Commission on Human Rights to draw attention to the effects of racial discrimination from the multiple industries in their parish and to the lack of effective state and national policies to protect them.

This petition resulted in a case called *Mossville Environmental Action Now v. United States* (Cahill-Jackson, 2012). This case marked the first time an environmental racism case in the United States has been taken on by the Inter-American Commission on Human Rights (Roberts, 2011). Ultimately, the case was dropped when most of the Mossville residents agreed to let Sasol, a chemical company who built a $21 billion industrial plant in their town, buy their properties and relocate to avoid a potential lawsuit as well as bad publicity (Greenwire, 2021). There were about five hundred citizens in Mossville (Rogers, 2015), some of whom were

decedents from the twelve Black founding families (Johnson, n.d.). The buyouts led people whose families had been in Mossville for generations to leave their home.

Despite *Mossville Environmental Action Now v. United States* being dropped, the impact of the case remains ongoing. Christine and Delma Bennett's experiences as Mossville residents were featured in a video produced by the Environmental Justice Health Alliance for Chemical Policy Reform, Coming Clean, and the Center of American Progress in 2020, demonstrating the lasting effects of their community activism (Drennen, 2020). Additionally, the University Network for Human Rights (UNHR) released a report in November 2021 with data that strongly suggests the Sasol buyouts were racially discriminatory. Property buyout payments were 88% higher in a neighboring white town, where residents were receiving offers for their properties during the same period of time that Mossville residents were (Smith, 2021). In response to the report, Sasol stated, "property owner demographics were not taken into account when determining property value." (Smith, 2021). The UNHR's report collected data from 32 Mossville households who relocated after the Sasol property buyouts. Almost 69% of the households interviewed stated that the compensation they received for their home was insufficient for relocating to a property of similar quality and 62% of the households recalled experiencing distress due to their property loss and injustice (UNHR, 2021). This report being released nearly a decade after the buyout has shown how influential the grassroots activism in Mossville has been and how the town of Mossville will continue to be studied and used as an example of the harms of environmental racism.

In 2011, Merrill Singer, an anthropologist at the University of Connecticut, published an article containing interviews of Black residents in Donaldsonville, Louisiana who lived near

industrial plants. The residents reported a range of risk perception ranging from being very concerned about the plant pollution to being dismissive about it. Overall, most people interviewed did not consider their individual health to be good nor did they consider their town a healthy environment to be living in (Singer, 2011).

One man interviewed, who worked at an industrial plant, was adamant that inhaling chemicals is what makes the people in town sick. He stated, “Ain’t nothing but the plants. Sometimes you gotta watch what kind of food you eat too. Because the animal be eating things and it make you sick” (Singer, 2011, p. 153). His belief in the plants causing sickness was similar to a woman who felt that Donaldsonville was a dangerous area due to the fumes and odors present. She reported living in fear because she did not know what she was inhaling in her lungs on a daily basis. Some interviewees reported feeling intimidated and helpless against “Big Men” with higher social status because they are politicians. These “Big Men” typically represent the interests of the chemical companies in town over concerned residents (Singer, 2011).

While multiple interviewees from Donaldsonville were concerned about living near plants, some were not worried about their living environment. One teen was confident that the chemicals emitted from plants did not affect him, attributing his blood problems to his poor diet. Another resident who had lived in Donaldsonville for over sixty years was not concerned about the industrial plants and stated that he was used to inhaling fumes (Singer, 2011). Singer’s study indicated that Black residents in Donaldsonville were overall concerned with living near toxic pollution and contamination, but that concern was not universal.

An article by Pamela Waldron-Moore (2007) used quasi-experimental methods to determine what factors had a relationship with environmental activism and the residents’

perception of environmental threats. The results of this study indicated that individuals with higher education levels are more likely to take political action in their community. Education also plays a critical role in risk perception of living in a hazardous community, with more highly educated people perceiving a higher environmental risk than those with lower education levels (Waldron-Moore et al., 2007).

The peer-reviewed literature on environmental racism and Mossville discussed in this literature discussed the public health effects of environmental racism, the direct social effects of environmental racism, public policy failures in Black communities experiencing the slow violence of toxic pollution, and examples of communities organizing and fighting for environmental justice. The experiences of living with toxic pollution and racism discussed in the Mossville life narratives adds to the existing bodies of research on Mossville, Louisiana.

Chapter 3: Research Question

The scarcity of peer-reviewed literature available about Mossville that goes beyond health effects demonstrates the need for more research about the town. Little if any peer-reviewed literature has been published containing interviews or testimonies of Mossville residents. Studies focused on residents and their personal experiences would add to understanding the health and social implications of living in Mossville by including disenfranchised voices that can and should inform anti-racist policy-making. Additionally, sharing the stories of residents who lived in Mossville can emphasize the importance of protecting historically Black towns and communities from environmental racism.

The literature review demonstrates the consequences of environmental racism and the importance of community and grassroots organizations, but also supports the need for policy makers to consider systemic racism as a core problem of environmental policies that continue to harm communities of color. The people of Mossville have spent over two decades collecting information to seek justice and live in a clean environment (Cahill-Jackson, 2012). Their local government, the Environmental Protection Agency, and the Agency for Toxic Substances and Disease Registry have all failed the people of Mossville. These policy failures draw attention to the systemic racism in the United States and how policies failed to protect Black communities in southern states from the harms of industrial facilities. Future policy makers should prioritize public health over industrialization in order to protect human rights.

The stories of those who have successfully fought for environmental justice in their communities demonstrate how impactful the political stream can be. Part of the political stream refers to the national mood and how government officials sense the it through letters,

town meetings, and other channels (Kingdon, 1995, p. 146). Grassroots organizations, like MEAN, and other channels that help decision makers understand community members are both important parts of the political stream and have the power to influence public policy in a positive and equitable way.

Existing peer-reviewed literature does not depict life in Mossville in its entirety through history, culture, and residents' lived experiences. By examining these lived experiences, policy makers and historians can better understand how systemic racism affected the community and how residents responded to the slow violence of racism. The life narratives provided by the Mossville History Project provide a fuller story of what life in Mossville was like before, during, and after Sasol's property buyouts.

The research question examined by this project is:

How did and does environmental racism impact the lived experiences of Black residents in Mossville, Louisiana, and what are the policy implications of this qualitative information?

Peer-reviewed literature published on Mossville and similar areas focuses on quantitative data and the health effects of toxic pollution. However, qualitative data will better inform public policy makers by providing a comprehensive perspective with a deeper understanding of multiple facets of Black communities such as Mossville, and why these communities need to be protected. This research question will be answered by analyzing the historical community and culture in Mossville, industrial presence, racial integration, local governance, and individual risk perceptions through oral histories of former residents of Mossville, and thereby add to the existing body of environmental justice literature focused on

other Black southern towns in the United States that have experienced and continue to experience environmental racism.

Chapter 4: Methods

Data Gathering and Design

The interview data used for this case study comprises oral history interviews from the Mossville History Project conducted by Louisiana State University researches in collaboration with the Calcasieu Museum. This project consists of sixty-two interview segments that were recorded in 2015-2017. The interviewees were Black adults who grew up in Mossville, Louisiana. These interviews are available for public access through Louisiana State University's website. The interviewers chosen for this project had careers in history, anthropology, museums, and social justice work. Table 2 provides an interview number for each interview. Some residents participated in multiple interviews and some interviews featured two or more interviewees.

Table 2: *Louisiana State University Mossville History Project Interviews*

Interview Label	Interviewee(s)
Interview 1 - 3	Lenoria Ambrose
Interview 4	Shirley Andrus and Carolyn Marshall
Interview 5	Ronnie Banks
Interview 6	Christine and Delma Bennett
Interview 7	Charlotte Bernard
Interview 8	John Bernard
Interview 9	Donald Braxton
Interview 10 - 11	George Braxton and Velma Carheel
Interview 12 - 13	Daren Dotson
Interview 14 - 15	Barry Edwards
Interview 16	McKenneth Edwards
Interview 17	Dorothy Felix and Evelyn Gasaway Shelton
Interview 18	Kevin Fondel
Interview 19	Janie Gardner
Interview 20	Edward Julia Lemelle Gordwin
Interview 21	Sims Audrey Guillory
Interview 22	Jawanna Huntsberry
Interview 23	Clay Roger Jackson
Interview 24	Cole Brenda Jones
Interview 25	MaryJane Jones
Interview 26	Jourdan Family
Interview 27 - 28	Margaret Enola LaTour-Pitre
Interview 29 - 31	Kenneth Arthur Lee
Interview 32 - 34	Edward Lemelle Jr
Interview 35	Hal McMillin
Interview 36 - 38	Judy Gauthia Montgomery
Interview 39	Wesley Montgomery
Interview 40	Larry Payne
Interview 41	Vera Payne
Interview 42 - 43	Morris Prater
Interview 44	Jimmie Lee Riggs
Interview 45 - 46	Carolyn Rigmaiden-Frank
Interview 47 - 48	Gloria Rogers
Interview 49 - 50	Marie Myrtle Rosamore
Interview 51	Patricia Prater Rubit
Interview 52	Evelyn Shelton Gasaway
Interview 53	Huber Smith
Interview 54	Marie Towner and Lenoria Ambrose
Interview 55	Rufus Victorian
Interview 56 - 59	Haki Vincent
Interview 60	Lillian Washington
Interview 61 - 62	LaSalle Williams

These interviews are available to the public and can be found on online at Louisiana State University's Mossville History Project webpage. The historians who conducted these interviews aimed to include stories capturing Mossville's culture, education, religious establishments, social events, politics, and other histories that would preserve Mossville's history after Sasol's buyouts (Mossville History Project).

Life Narratives

I chose to analyze life narratives as qualitative data because they provide unique perspectives and personal timelines that connect to broader themes. Narratives serve an important role in data collection because they provide causal links that are often missing from existing research and literature based on quantitative data. Examining life narratives allows researchers to connect events, places, and people through individuals who have lived through these experiences. These events provide a continuous story (Lumsden, 2013) that is absent from literature that only analyzes pollution rates, health disparities, or policy changes. Analyzing the life narratives of the residents of Mossville adds to the existing body of literature focused on environmental issues by providing a deeper understanding of what Mossville, a historically and once predominantly Black community, experienced when suffering from environmental racism.

The life narratives of Mossville residents provide insight to the town's culture and events and how they shaped people's perceptions of risk and the slow violence that they experienced. Additionally, the life narratives highlight aspects of culture and specific events that were the most important to the people who lived there. Because these residents shared

their stories, historians and policy makers can be aware of how Mossville compares and contrasts with other Black communities harmed by systemic racism.

Analysis

To analyze this qualitative data, different key codes and subcodes were identified to highlight which aspects of living in Mossville made the greatest impact on residents there. The subcodes were used to separate the larger codes into identifiable themes. The codes are listed in Table 3. I selected these codes based on categories identified in *Dumping in Dixie* by Robert Bullard (2020), a foundational work on environmental racism issues in the American South. After coding the interviews, the most repetitive codes were analyzed to gain a better sense of what living in Mossville was like.

The codes with the greatest levels with the connectivity across interviews were chosen to be the themes primarily analyzed. These codes are Mossville history (n = 56), community and culture (n = 40, local government (n = 26), industrial plants (n = 25) with the subcode, relocation/buyouts (n = 40), race (n = 77) with the subcode, integration (n = 54), and risk perception (n = 50). Table 3 provides the codes used, and the subcodes that corresponded with each code. Table 4 provides examples of quotes selected for each code and the assigned subcode.

The codes and subcodes illustrate common themes across interviews and allow insight as to what parts of Mossville were important to the interviewees. These themes will be discussed in the findings along with supplemental research that provides details such as a dated timeline of historic Mossville events. The secondary source material that was reviewed includes

articles that covered Mossville and Sasol's buyouts. After coding the interviews, and referencing secondary source materials, the findings of the life narratives appear in Chapters 5 and 6.

Table 3: *Coding Interview Data*

Codes	Subcodes
Community and Culture	Canteens Community Connections Entertainment Town Pride
Industrial Plants	Community Activism Damage to the Land Direct Health Effects Plant History Relocation/Buyouts
Local Government	
Mossville History	
Race	Integration Racial Safe Haven
Risk Perception	

Table 4: *Coding Interview Examples*

Code	Subcode	Representative Quote
Community and Culture	Community Connections	"Well everybody's like family in Mossville… I hate to see us breaking up this way and everybody scattering out everywhere and going to different directions. I was hoping we could all… If they could have worked something out where they could put us all back in another Mossville somewhere else." (Interview 55)
Industrial Plants	Direct Health Effects	"My mother had cancer, her sister had cancer, and they all lived here until the 50s." (Interview 44) "You could smell it from the plant. And matter of fact when you pass through here, that stuff be so strong it burns your eyes… That plant was horrible." (Interview 22)
Industrial Plants	Relocation/ Buyouts	Everybody had to fend for their self. And the little money they paid the people for their houses and property didn't do anything but get them into debt. So all those people that were moved out, they're in debt big time. So they're worse off than they were in the beginning… they weren't paid enough money to relocate their selves." (Interview 59)
Local Government		"They discussed leadership. Who would be best fitted for our little community. Who would fill the needs of the community? And once they discussed that among themselves, a few men of the community and church…they were called the "body" of the community leaders…" (Interview 34)
Mossville History		"We was pretty much unincorporated as long as I can remember, which mean that we was a little town sitting right there, but we was not affiliated with Westlake nor Sulphur. We was our own little town." (Interview 50)
Race	Integration	"So on the very first week when the buses drove up to the school, they had ropes tied up in the trees, like they were going to hang. And that's what started all the racial fights…They didn't want the Blacks in their school. And the Blacks didn't want to go." (Interview 62)
Race	Racial Safe Haven	"What I realized was being in an all-Black school was a real benefit, I think, for me, I will say that, because, I think the support we had in that school." (Interview 27)
Risk Perception		"Was nothing you could do about, because you didn't have no resources then… These plants did whatever they want to, that's why they polluted the place…" (Interview 62)

Chapter 5: Findings

In this section, I will start with the history of Mossville as told by the former residents, the history of industrial plants in Mossville and how these facilities led to the relocation of residents, the community and culture of Mossville, the role educational integration played in socially harming Mossville, and how residents did or did not perceive the plants as a risk in their community. Table 5 illustrates historically significant events in Mossville and surrounding areas.

Table 5: *Mossville Timeline* (Mullins, 2016)

1790s	Mossville's first non-Indigenous settlers moved there.
1855	Sawmills were built in Calcasieu Parish, establishing the first industrial facilities in the area.
1930s	Olin was the first industrial plant built in the Lake Charles area.
1940-1950	Conoco and Cities Service built large refineries in Calcasieu Parish.
1960s	Racial integration occurred, meaning that the government mandates forced closure of Mossville's schools and bussing of Black students to schools in white towns.
1995	Condea Vista, acquired by Sasol in 2001, affirmed that the groundwater in Mossville was contaminated. This contamination led to a class action lawsuit and a buyout in 1998.
1998	The ATSDR found dioxin in the blood samples taken from Mossville residents.
2012	Sasol began to offer residential property buyouts to Mossville residents.

Mossville History

Mossville was a small rural town with a strong Black community founded in the 1790s by Jim Moss, alongside his brother, Henry Moss and was one of the first towns of free Black people in the Southern United States (Rogers, 2015). The brothers, former slaves, built a post office and a grocery store, which would develop into a thriving town before the oil and chemical industries bought out the residents (Interview 10). Interviewees recalled Old Spanish Trail being nothing but a dirt road during their childhood, where the families who had lived in Mossville for decades resided. As the town population grew in the 1970s, the road was eventually paved, but continued to serve as a historic landmark for the founding families (Interview 24).

Mossville had successful small businesses such as drugstores and bars (Interview 61). Interviewees described growing up in this rural town without running water and sewage and attending school in a two-room schoolhouse (Interview 52). Christine Bennett described descendants from the founding families, such as the Mosses, living on Old Spanish Trail (Interview 6). The descriptions of Mossville paint a picture of a rural town with families who lived there for generations and where everyone knew each other.

Mossville is nestled between the towns of Westlake and Sulpher, Louisiana. Mossville expanded east towards Sulpher as the population grew, and Old Spanish Trail shifted into East Burton Street. The west area of Mossville where the founding families lived was referred to as Mossville “proper” by the residents (Interview, 29). The important geographical landmarks of Mossville included Mount Zion Church, the all Black public school, and the recreation center, all located in Mossville proper. As time went on, the town of Mossville shifted from being a quiet and safe rural community to a town that experienced racism during the Jim Crow era and

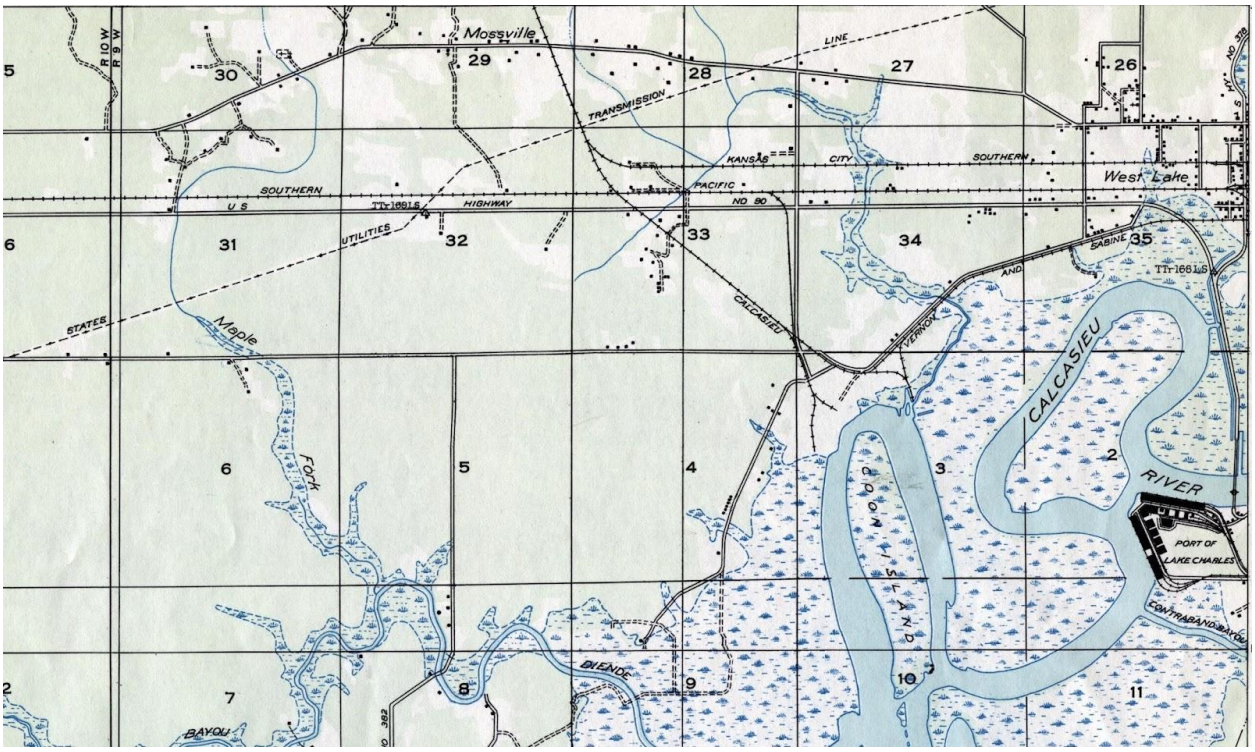
integration, and escalating environmental racism from the 1930s to the early 2000s when Sasol bought almost the entirety of the town's residential properties, resulting in nearly all of the residents relocating to other places.

Figure 1 illustrates where Mossville is located, in Southwest Louisiana. Figure 2, a map of Mossville from 1932, illustrates what the town looked prior to multiple petrochemical plants being constructed, and where Mossville is located in relation to the Calcasieu River and Westlake, a neighboring town.

Figure 1: *Map of Mossville, 2007*

(Mossville Environmental Action Now!, 2007)

Figure 2: *Map of Mossville, 1932*



(Mossville History Project, 2017)

Plant History

Olin was the first chemical plant to come to Mossville in 1934. Following Olin was ConocoPhillips, PPG, Cities Services, Citco, and eventually Sasol. The plants boomed in the 1940s and provided job opportunities that many locals were excited about. Working for big companies provided a sense of accomplishment and pride to many, including Lenoria Ambrose, who was proud to be the first Black woman to work for Olin (Interview 3).

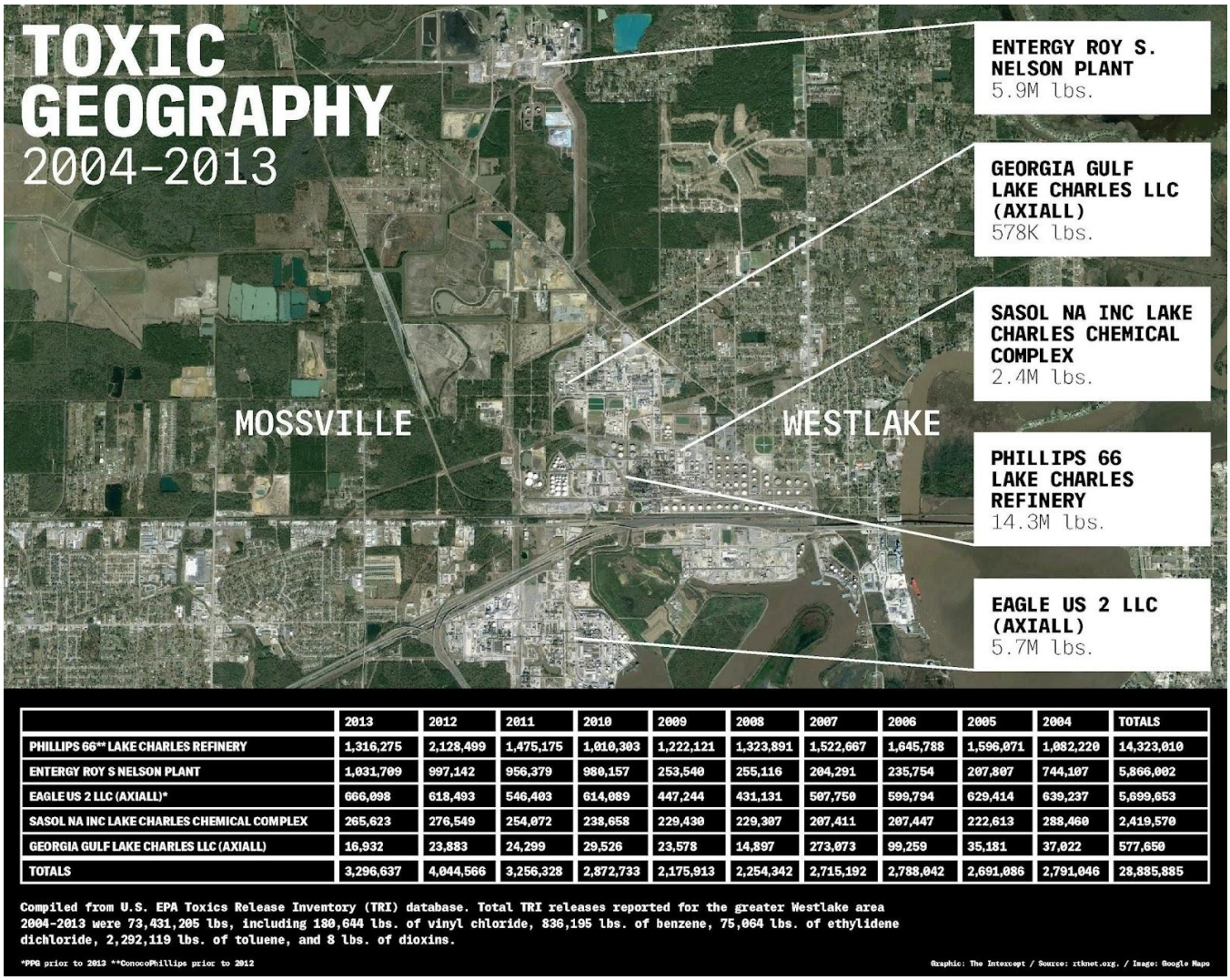
As industries continued to expand throughout the twentieth century, Sasol began buying individuals' properties in the early 2000s, which eventually resulted in Mossville being torn down and replaced by industrial plants. This was the third buy-out that the town of Mossville experienced; the first two were from a company called Vista (Interview 26), which was bought

by Sasol in 2001 (Mullins, 2016). The Vista buyout occurred in 1998 after Vista confirmed that they were responsible for groundwater contamination in 1998 (Mullins, 2016). According to the testimonies, Sasol first targeted the elderly and less educated residents of Mossville, persuading them to sell their homes through false promises. For example, Sasol told residents that if they sold their homes to Sasol, they would have enough money to buy two more homes. In reality, most of the residents did not even receive enough money to buy one home without taking out a loan, which was a significant financial setback considering many of the homes had been passed down through generations (Interview 22).

Christine Bennett recalled being the last of her social circle to leave Mossville because it was still the place she would always call home. Bennett recalls Sasol buying out the older residents first and stated, “that’s just what white folks did… A lot of our older people sold land to the industries not understanding what they were doing” (interview 6). With the town of Mossville essentially gone, Kevin Fondel Sr. leaves one request, “The most important thing I want people to remember is that when you drive down Old Spanish Trail… this community center may still be here, the swimming pool and all that, but there were people here too. A lot of African American people were here. And I think this is one of the communities that survived after slavery” (Interview 18).

Figure 3 illustrated a map of industrial refineries and plants in Mossville and the neighboring community of Westlake, Louisiana from 2004-2013.

Figure 3: *Toxic Geography: Plants Emitting Toxic Waste*



	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	TOTALS
PHILLIPS 66** LAKE CHARLES REFINERY	1,316,275	2,128,499	1,475,175	1,010,303	1,222,121	1,323,891	1,522,667	1,645,788	1,596,071	1,082,220	14,323,010
ENTERGY ROY S NELSON PLANT	1,031,709	997,142	956,379	980,157	253,540	255,116	204,291	235,754	207,807	744,107	5,866,002
EAGLE US 2 LLC (AXIALL)*	666,098	618,493	546,403	614,089	447,244	431,131	507,750	599,794	629,414	639,237	5,699,653
SASOL NA INC LAKE CHARLES CHEMICAL COMPLEX	265,623	276,549	254,072	238,658	229,430	229,307	207,411	207,447	222,613	288,460	2,419,570
GEORGIA GULF LAKE CHARLES LLC (AXIALL)	16,932	23,883	24,299	29,526	23,578	14,897	273,073	99,259	35,181	37,022	577,650
TOTALS	3,296,637	4,044,566	3,256,328	2,872,733	2,175,913	2,254,342	2,715,192	2,788,042	2,691,086	2,791,046	28,885,885

Compiled from U.S. EPA Toxics Release Inventory (TRI) database. Total TRI releases reported for the greater Westlake area 2004-2013 were 73,431,205 lbs, including 180,644 lbs. of vinyl chloride, 836,195 lbs. of benzene, 75,064 lbs. of ethylidene dichloride, 2,292,119 lbs. of toluene, and 8 lbs. of dioxins.

*PPG prior to 2013 **ConocoPhillips prior to 2012

Graphic: The Intercept / Source: rtknet.org. / Image: Google Maps

(Rogers, 2015).

Community and Culture

The interviews conducted with Mossville residents typically concluded by asking interviewees what community meant to them. Across all interviews, residents described an unbreakable bond among them. Almost everyone was “kin,” meaning most of the residents descended from the same founding families. These bonds resulted in generosity and collaboration in everything from

raising the town's children together to volunteering at Mount Zion Church, a central gathering place for residents that essentially served as a town hall.

What set Mossville apart from other small rural towns in South Louisiana was that it was a "completely totally Black community" as described by George Braxton and "a safe haven for African-Americans to live in… located far enough from the hostility, that they had nothing to worry about" as described by Dorothy Felix. Living in Mossville allowed people, especially children, to thrive without the everyday acts of racism experienced by Black people in mixed communities. Without racial segregation, young people were free to visit a local "canteen" or parlor where Southern traditions such as drinking, eating, and dancing took place. When children in Mossville were not attending school, they could be found digging for crawfish or looking for gold buried on Old Spanish Trail, one of Mossville's legends passed down from generation to generation or running from the sycamore tree on Old Spanish Trail to avoid being caught by a ghost (Interview 26). The people of Mossville had strong ties to their land, and most of the interviewees shared fond memories of gardening and farming with their families, and thriving in their own community without being concerned about dealing with the daily effects of racism.

Mossville High School was a memorable part of growing up in the town. One teacher, Coach LaSalle Williams, positively influenced the town enough to have a road named after him. The most influential part of the school was that it was made up entirely of Black faculty and students. Students had support from their teachers and administrators that was not conditional on the color of their skin. Additionally, there were no racial threats in the community, which allowed them to focus solely on their education (Interview, 27). "Mossville provided us not only an environment for education and for learning, but for confidence building and for security, being

in an all-Black school," stated Enola LaTour-Pitre when describing her experience at Mossville High School. However, the safety Mossville children were provided when attending school was gone once the town was forced to integrate with neighboring white cities.

After high school, some residents of Mossville attended McNeese State University in Lake Charles, Louisiana. A few others went to Southern University, a historically Black institution of higher education in Baton Rouge, Louisiana. Careers in Mossville were limited, much like other rural areas. Women traditionally stayed home or had caretaking or housekeeping careers. Before the industrial plants began construction, many men worked on farmland or at lumber mills (Interview 26). Other common careers in Mossville included working at local businesses like the Rougeau's grocery store, teaching, and joining the army during World War II. The first plant was built in Mossville in 1934, and others were built following World War II.

After the boom in industrial plants, local laborers began taking jobs at the plants instead of at farms (Interview 54). These jobs marked a change in the careers of many residents and provided an opportunity for many to work in a new environment. Industrial plant jobs mentioned in the interviews included working in management (Interview 11), construction (Interview 34), and transporting chemicals (Interview 24).

Race and Integration

When integration began in the 1960s, in response to federal mandates, the children of Mossville were bused to schools in Sulphur or Westlake. At these schools, the children's education was disrupted by racism, inequities, and violence. Christine Bennet described integrating to Westlake High as horrible, with white parents violently protesting integration

(Interview 24). Bennet recalls being called the n-word, receiving death threats, and being denied the same textbooks and opportunities that the white children received (Interview 26). Lenoria Ambrose described integration as "the first inkling that I had ever had of hatred," after growing up in a Black town. Despite integration negatively impacting Mossville's children, Mossville High School was forced to shut down by the government in 1968 because it was an all-Black school (Interview 24).

While integration may be seen by white people as a progressive change and a step forward, it is necessary to listen to Black voices and their stories and experiences with integration to understand the whole picture. Enola Margaret LaTour-Pitre recalled integration by stating, "You walk into a learning institution already afraid of what's going to happen to you." She also recalled having "my own personal secret pride of being part of a Black community that thrived… we had the Creole culture, we had the historical people who were there from the beginning," and a sense of proud ownership that accompanied being part of a Black town and community. These experiences and connections to local Black history were tragically lost during integration when students were no longer allowed to stay at Mossville High School. While integration may have been a step forward toward an anti-racist America, Black people were integrated into systems that harbored deep racism. These interviews revealed how harmful being integrated into a racist school was on a personal level for Mossville residents, who were previously receiving an education uninterrupted by the hatred of racism.

Local Government

Mossville had no formal government aside from the Louisiana state government. The closest position they had to an elected official was an honorary mayor, Joshua Rigmaiden. As a

predominately Baptist community, Mount Zion Baptist Church played an important role in civic affairs with town leaders meeting there to discuss business when Church was not in session. With no formal governance, civic action was often taken on individually. Husband and wife, Delma and Christine Bennett, recalled opposing the new plants being built and a couple of other women remembered going to Washington D.C. to protest in 2005. While a few of the interviewees were passionate about contesting the oil and chemical industries, Deran Doston Sr. described fighting the industries as, "throwing water in the wind. It's going to blow back on you." Christine Bennett emphasized that there was nobody willing to fight for Mossville because it was a Black community. Delma Bennett explained that areas like Mossville were already undesirable to white people because they were swampy, which made settling in them affordable and accessible to Black people. The town was founded in what was thought to be land safe from racism. Ironically and tragically, it was bought out by white people through the companies that developed there. Lastly, Christine Bennett recalled going to a doctor in Chicago for some undiagnosed health problems she was having. Upon learning she was from Mossville, he refused to treat her with no further explanation. Overall, the interviewees were less passionate about activism and government and were more passionate about their memories in their sacred and beloved hometown.

Interviewees may not have been passionate about activism and local government because of their experiences with voter suppression, Jim Crow laws, and other racist policies designed to police communities of color. Living with the slow violence of racism involves fighting policies and systems put in place to prevent equal rights and racial justice. All of these forms of racism, and many more, make being involved with local government and grassroots activism

complicated, difficult, and sometimes impossible for Black people and their communities. More research on the history of the extent to which Mossville residents participated in local and national electoral and legislative politics following the civil rights gains of the 1960s is needed to contextualize the interviewees' attitudes toward activism.

Risk Perceptions

The risk perceptions of the dangers of living near chemical plants varied between individuals. Some interviewees expressed not wanting to be exposed to chemicals emitted from the plants, while others reported their peers' lack of understanding of the dangers associated with working in chemical and oil plants. George Braxton, who was employed by ConocoPhillips, viewed plants as a necessary evil that helped the town economically by providing high paying jobs. Others reported people dying within seven years of working at a plant because of the toxin exposures. A few interviewees were apprehensive to say anything negative about the oil industry, with one woman not wanting to discuss any actual environmental risks she may have been exposed to, requesting that the negative experiences she discussed be redacted from her interview for her own protection, She stated, "in case it should turn into some type of lawsuit… I would like to have that part restricted "(Interview 24).

While health problems were not often perceived as a significant risk among residents, some residents were concerned about safety threats from the frequent explosions the plants caused. Brenda Cole Jones recalled being nervous for her community after seeing a neighboring town called Bel Air destroyed by environmental damage. The government eventually forced everyone out of Bel Air because the water contamination was so dangerous to public health (Interview, 24).

Members of the Jourdan family who were interviewed, described learning about the environmental hazards as a slow process that developed as people started comparing their health histories and experiences and connecting them to the industrial facilities in Mossville. LaTour Jourdan provided a unique stance stating that the residents of Mossville should have fought against systemic racism when integration began in the 1960s. According to LaTour, fighting to keep Mossville High School open could have formed a strong union among residents that might have prevented Sasol from coming.

Nearly all the interviewees recalled having personal health problems or knowing people with health problems that could have been caused by the slow violence of toxic pollution. While it is challenging to prove causal factors when it comes to conditions like asthma and cancer, memories like evacuating school and smelling strange odors because of unclean air are tied to toxic pollution. Slow declines in community health, soil health, and air quality were undeniable but gradual, resulting in many residents staying put despite the health risks.

Regardless of whether Mossville residents were concerned about the environmental risks they were exposed to, these residents mourned the loss of their culture and community. Carolyn Frank-Rigmaiden stated that she would have loved to live in Mossville all of her life and other interviewees emphasized that there was no other community like Mossville. Not only were homes and town businesses knocked down and replaced with petrochemical infrastructure, but the safe haven of a strong and thriving Black community was stripped from everyone who lived there. Jimmie Lee Riggs tearfully ended his interview stating, “Mossville will always be my home. Regardless if there’s no one there, it’s still my home.” What was taken from this community is invaluable and irreplaceable.

Chapter 6: Discussion and Conclusions

Discussion

The life narratives of Mossville residents convey how invaluable the culture of Mossville was before residents were displaced by the petrochemical industry's property buyouts. Mossville allowed Black people to live in the rural South, sustain themselves through farming and agriculture, inherit generational wealth, and be sheltered from some forms of racism. Their culture was rich, full of family traditions, a sense of town pride, and shared values. The oral histories tell stories of a safe haven for children that was disrupted by white people in power. Even before the land damage and buyouts from the oil and chemical industries, the community faced the devastating consequences of forced integration. Before integration, Mossville High School provided children with an education uninterrupted by daily experiences of racism. Despite the good intentions of federal desegregation initiatives, educational integration was the first event in some people's lives where they experienced direct racism.

Educational integration, along with the environmental racism that destroyed the culture of Mossville, illustrates a clear pattern – Black communities are oppressed and suffer when they are not involved in political decision-making. School integration is an important part of the Mossville story, playing the role of a dark omen of what was yet to come. The just sustainability framework developed by Julian Agyeman emphasizes how communities cannot truly be sustainable unless all of their social needs are met (Agyeman et al., 2002). While integration has allowed America to move towards a more equitable society, it is important to recognize the harms the Black students in Mossville faced when they were suddenly forced to receive their education at a historically white school with racist students, parents, and teachers. This loss of

educational autonomy was followed by the buyouts, less than fifty years later, along with the slow devastating health effects of pollution such as cancer.

Despite the strong founding of Mossville, this community was hobbled as a result of both school integration and much older structural practices of racism in the U.S. South related to political participation. Without basic social needs being met, such as education, and without full voting power, how can a community fight off an industry as big as the petrochemical industry? Robert Bullard identified emotion-focused coping as a response to environmental injustice when communities feel that they cannot change what is happening to their community. The interviews of Mossville residents poignantly displayed their grief for their destroyed homes and the sense of helplessness that many residents felt as the petrochemical industry took over. Yet many of the residents interviewed were not involved in political activism, which demonstrates the long-term legacies of racist, inequitable systems of political representation.

Environmental activism in Mossville was mentioned in eight of the interviews, which might seem surprisingly low considering the life-changing impacts the industrial facilities had on the residents who lived there, but not surprising given the South's long history of repressing Black votes and promoting corporate economic health at the expense of human and environmental health. Southern states, such as Louisiana, have a long history of suppressing Black voter rights. One way the state of Louisiana suppressed voter rights was editing their Constitution at the beginning of the twentieth century to implement poll taxes and property and literacy requirements to be allowed to register to vote (Democracy Docket, 2021). It wasn't until January 2022, that Homer Plessy, of *Plessy v. Ferguson*, was pardoned by Louisiana's

governor, John Bel Edwards. Edwards signed the pardon in New Orleans, near the location where Plessy was arrested almost 130 years earlier (Burnside, 2022). This pardon was an important way to honor Plessy, but also demonstrates just how long appropriate reparations can take in Louisiana. The powerful history of Black voter suppression in Louisiana effected Black communities all around the state, including Mossville.

Despite activism not being a major theme of the oral histories, the story of Mossville has recently gained national attention and been published in major media outlets such as *The New Yorker* and *Vox*. In the fall of 2021, Michael Regan, the first Black man to head the EPA (Smith, 2021), visited Mossville on his Journey to Justice tour (Kofman, 2021). Regan's visit to Mossville was one stop he made in the South while examining the effects of environmental racism in the United States. While in Mossville, Regan received a tour and met with Carolyn Peters, the president of the local grassroots movement, Concerned Citizens of Mossville also known as MEAN, as well as other locals who have been affected by the pollution (Reiss, 2021). Residents of Mossville stated that this was the first time the top environmental regulator in the United States visited Mossville, despite years of environmental pollution and damage. These former and current residents shared with Regan how their concerns for their health have been ignored by local and federal government officials for decades (Kofman, 2021). Regan acknowledged the failures on both local and federal government levels stating, "If the EPA, the federal government, state governments, and local governments had been doing things correctly, we wouldn't be here. There's obviously a problem with the way we have implemented our laws and, quite frankly, there may be a problem with the existing law." (Kofman, 2021). His

acknowledgement of these government failures is a significant statement considering how often communities facing environmental racism have been ignored by public officials.

Carolyn Peters emphasized to Regan that she wanted him to know what the town was like and described clubs, stores, churches, and how beautiful Mossville was to her before the property buyouts (Riess, 2021). Tours like Regan's are an important part of understanding the connections Black communities have to historically Black towns. Additionally, life narratives demonstrate these ties and the historic events that occurred alongside environmental racism, such as racial integration. After his tour of Mossville, Regan stated that he would report what he learned in Mossville back to Washington D.C. (Riess, 2021). Policy makers must visit towns like Mossville to better understand the complex effects of building industrial faculties built in residential communities. Touring communities of color and reading the life narratives of those from polluted towns are important ways policy makers should educate themselves. Through learning about residents' lived experiences and the histories behind these towns, readers can understand how disenfranchisement harms minoritized communities at multiple levels

Regan's Journey to Justice tour provides hope that the EPA will implement new policies and enforce existing policies that protect marginalized communities from environmental racism after the Trump administration cut EPA funding (Kofman, 2021). On the other hand, the temporary presence of government officials does not guarantee that meaningful change will occur. In the words of Christine Bennett, "We've met with so many of them over the years. All we do is be heard." (Kofman, 2021). Activists like Bennett have been speaking out for years and only time will tell if Regan's tour will result in positive changes and action. Local activists have been fighting for environmental justice for over two decades, and when their experiences

include fighting constant uphill battles against powerful industries, other community members may perceive change unlikely, discouraging them from joining grassroots organizations.

Limitations

One limitation of the Mossville History Project is that it was funded through a grant provided by Sasol, the chemical company that participated in the buyouts and displacement of most of the Mossville residents. The interviews were conducted by Louisiana State University employees who had no apparent direct personal connection to Sasol or other involved industries. Additionally, the interview funding was not mentioned in the recorded interviews. However, the interviewees could still have known where the project funding was coming from and been concerned about sharing their full experiences with the chemical industry when sharing their life narratives, as noted explicitly by at least one person interviewed.

Another limitation to this project relates to the inherent shortcomings of oral histories and other sources based on memories of the distant past. The oral histories did not include consistent and specific dates and the timelines of events in Mossville that were provided were sometimes unclear. Mossville did not have a town newspaper which makes it more difficult to verify the dates of certain events. In this way, oral histories can provide rich qualitative data but should always be triangulated with other primary sources such as private diaries, public records, government documents, and journalistic accounts. Despite these limitations, the experiences of the residents of Mossville as revealed in these interviews provides important perspectives for scholars and practitioners of environmental justice and public policy.

Future research should be designed with these limitations in mind and would ideally be funded by a source that was not directly involved in the suffering of those interviewed like Sasol

was. To prevent other limitations in future research, oral histories should be utilized with other primary sources and historic documents to create a more comprehensive understanding of Black communities and their experiences with the slow violence of environmental racism in the Southern United States.

Implications for Research

The story of Mossville has become a part of the current public policy agenda, specifically in relation to EPA Administrator Michael Regan's agenda of advancing environmental justice. With activism being an important part of Mossville's story, this raises the question of why wasn't activism brought up in more of the life narratives. Racial integration of the school system was a prominent theme of the oral histories and served as a turning point in Mossville's timeline. After experiencing educational integration and being denied the autonomy to make their own education decisions, residents in Mossville may have felt hopeless and like they could not fight the powerful businesses putting up an increasing number of industrial facilities in their community. Additionally, community involvement may not have been accessible to some residents. Joining and participating in grassroots organizations requires more than dedication; it requires the time to do so. The interviewees in the Mossville Oral History Project worked and many of them had families they took care of as well. Adding community activism to their agenda, may not have been realistic for these interviewees.

Future research should examine the effects of long-term political racial disenfranchisement and more recent educational integration on Calcasieu Parish and why certain Mossville community members like Christine Bennett, felt called to be involved in community activism while others did not. The oral histories conducted by Louisiana State

University illustrate how important Mossville was to the people who lived there. The lack of community activism and involvement with those interviewed is not a reflection of the importance of the town to those residents. The interviewees spoke fondly of Mossville and shared the pain they experienced as the town fell victim to the slow violence of environmental racism. Perhaps these interviewees felt helpless after their violent experiences of disenfranchisement and racial integration. Perhaps living and coping with the everyday violence of environmental racism, along with few historical avenues for political participation in local, state, and national politics, left no more energy for fighting a losing battle against Sasol. It is important to note that a lack of community activism is not to blame for the toxic pollution and property buyouts in Mossville. White policy makers who hold political power must use that power to create equitable changes that include people of color. If communities of color were involved in policy decision making before their towns experienced environmental racism, there would be no grassroots organizations. By not including people of color in policy decision making, citizens of towns like Mossville remain the victims of the slow violence of political and environmental racism, and are left with the impossible burden of protecting their own town against well-financed corporate polluters because white politicians failed to do so.

Future research should closely examine current and historical voter repression in Black communities that live with environmental racism and how voter suppression has prevented Black communities from being able to vote for local policies. In the 1920s, Louisiana lawmakers created an “Understanding Clause” which required voters to “give a ‘reasonable interpretation’ of a section of the state’s constitution” to register to vote (Democracy Docket, 2021). This clause resulted in over a 30% Black voter registration decline and only a 2.5% decline in white

voter registration because of it was unequally enforced (Democracy Docket, 2021). Given the history of voter suppression in Louisiana, Mossville residents may not have been involved in grassroots activism because of how many times their votes and voices were silenced.

Future life narrative interviews conducted on former Mossville residents, or residents of other towns experiencing environmental racism, should include questions pertaining to how and why community members choose to be involved or not involved in community activism. Specific questions about individual's experiences with activism and access to local government involvement could provide stories about how systemic racism prevents involvement in local politics and decision making. These interviews could provide answers to how individuals perceive the environmental risks they are living with and if they feel that they can act in any way to mitigate or stop those risks.

School integration diminished educational independence from Mossville residents. Without being able to make decisions regarding their community's education, Mossville residents experienced a great loss. After this turning point, Mossville was permanently damaged by the racism community members experienced on top of much longer patterns of systemic discrimination in the U.S. South and the denial of voting rights. Future research should examine the effects of historical disenfranchisement and racial integration on small communities' risk perceptions and involvement in environmental justice activism. Mossville's timeline establishes that industrial facilities were present in the community before integration and on federal civil rights legislation initiatives of the 1960s, and increased in numbers after this time. One consequence of integration was the closing of Mossville High School because it was a Black school. This effect of integration, despite the concurrent passage of federal laws

strengthening Black voting rights, further oppressed Mossville, and may have made the town more susceptible to environmental racism. The effects of school integration demonstrated the unintended adverse consequences that national policies can have on local communities. Studying the timelines and life narratives of other Black communities could reveal similar events that unfolded and how integration and increased civil rights should have keep Black communities' needs as the top priority. This type of prioritization would have kept Mossville High School open and protected communities from the violent threats Black children experienced when suddenly attending a previously all white school. In addition to integration, other historic events could have occurred in other Black communities that were interceding factors while experiencing environmental racism, such as increased opportunities for participating in local, state, and national politics following the passage of the U.S. Civil Rights Act of 1964 and Voting Rights Act of 1965.

Implications for Policy

Implementing public policies to prevent environmental problems such as industry pollution will not effectively create just and sustainable communities nor protect them in the long term. Larger systemic changes must be made to protect Black communities. The history of Mossville has demonstrated that environmental racism occurs when Black communities are unable to sustain themselves in socially and economically. Moreover, social unsustainability is *caused* by systemic racism in the first place. Environmental racism and violence can be prevented only when the social and economic needs of Black communities are met and the communities are given equal opportunities and representation in government sectors.

Communities like Mossville cannot be recreated and once they are gone, they are gone forever. Sasol encouraged Mossville homeowners to sell their property by convincing them that relocation would be beneficial to them, but displacing the people of Mossville removed them from an entirely Black town and stripped them of their culture and identity. Before the buyouts, people were experiencing hardships from land damage and health problems. After the buyouts, they were left without their community, land, jobs, and homes. Protecting towns like Mossville will not only reduce environmental health problems, but will preserve cultural heritage. Mossville served as a historic landmark - a town of Black people that flourished for decades despite the lack of rights Black Americans had when it was founded. While it is too late to protect Mossville, policy makers should look at Mossville as a lesson as to why Black voices are important in politics and how important it is to provide equal rights and opportunities to Black communities in order to protect them from the violence of environmental racism.

In addition to the harms communities like Mossville face from toxic pollution, other environmental justice issues such as integration impede a town's autonomy. To move towards more equitable policy making, communities of color must be involved in all aspects of policy making on both local and federal levels. Environmental justice scholars and historians such as Julian Agyeman (2002), Robert Bullard (2020), Dorecta Taylor (2014), and Carl Zimring (2015) have all established the importance of the lived experiences of communities of color experiencing environmental racism through their published works. The town of Mossville is comparable in important ways to other southern Black towns in America, and the interviews tell the story of Mossville and how the lack of protective environmental policies affected the

town socially. This thesis adds to the peer-reviewed literature on Mossville by examining the social implications of environmental racism and the life narratives of former residents.

These implications demonstrate areas that future researchers should examine. These areas include the impact of voter suppression in the Southern United States, how long-term political disenfranchisement affects communities while fighting for environmental justice, and how historic events, such as racial integration, caused by long-term disenfranchisement, effect Black communities. Future research should also draw attention to historical and current racist voting restrictions and how these restrictions limit Black activism in communities facing environmental racism and prevent protective strong enforcement of environmental policies.

Conclusions

Mossville was founded before the Emancipation Proclamation, with no assistance from the United States government. Towns like Mossville were not founded with any official governance or policies because they were never given the rights to have these necessities. With a lack of local government, Mossville relied on the larger state and federal government, both of which failed the town on multiple levels. Policy makers can look at the devastation of Mossville as a painful yet important focusing event. Robert Bullard has stated that implementing racial justice frameworks to fight environmental racism would allow for more equitable public policy development. Environmental racism is often examined through a land and health focused framework, leaving out the core racial injustice issues that are necessary to make meaningful public policy changes (Ramirez, 2021). Black towns around the country need reparations and federal protections of constitutional voting rights so that their communities can resist pressures by powerful industrial stakeholders that could destroy their towns. To protect communities of

color, the state and federal government should create policies to regulate toxic waste and incentivize clean energy, and importantly, give members of these marginalized communities a stronger voice in policy and decision making processes

Current regulatory policies in the United States exist to protect the majority of Americans who live at a safe distance from toxic pollutants, but fail to protect the small communities who are most directly affected by industrial plants built in their communities. Environmental justice researchers have proven the inequities and dangers communities of color face, yet these problems are not addressed by mainstream political structures in America (Lerner and Brown, 2012). Environmental justice author Steve Lerner suggests that laws designed to protect communities from environmental racism will never pass as long as industries such as the oil industry can lobby members of Congress. These lobbyists claim that using safer technologies to prevent pollution would be too costly, raise the cost of consumer goods, and result in industrial jobs being exported to other countries. However, these arguments are disproven by studies that illustrate how improving environmental conditions increases wages and property values (Lerner and Brown, 2012). Furthermore, the ideology that stricter environmental regulations will harm America's spot on the global market is incorrect. Regulatory policies protect public health and go hand in hand with more sustainable technologies without harming economic progress (Lerner and Brown, 2012).

Charles Lee, former director and currently senior policy advisor for the EPA's Office of Environmental Justice, supports an integrated approach to helping communities of color who live in toxic environments. These communities not only face toxic pollution, but other concerns such as healthcare access and economic and social concerns. When facing these complex issues,

communities of color are not always able to address one issue at a time (Lerner and Brown, 2012). Improving healthcare access and pollution regulations, implementing proper waste clean-ups, and properly enforcing existing pollution regulations are a few steps policy makers can take to address environmental injustices (Lerner and Brown, 2012).

Additionally, many mainstream environmental organizations are inaccessible to local communities due to their corporate-like structure and lack of collaboration with community leaders and grassroots organizations (Bullard, 2020). Diversifying environmental political groups can lead to public policies designed for and by communities of color. To move forward and address environmental injustices, policy makers need to understand the complexity of environmental justice and listen to the voices of those affected. With organizations like the Deep South Center for Environmental Justice, directed by Beverly Wright, advocates for environmental justice are brought together. The Deep South Center has been fighting for justice for decades with Mossville residents going to the Climate Justice Summit in 2000 (Mullins, 2020). White public policy officials need to reach out to organizations such as the Deep South Center and listen to the voices of people of color who have experienced slow violence for generations.

Future research should examine what is happening in other Black communities in south Louisiana that are facing similar fates to Mossville. As of 2022, Formosa Plastics is to be constructed on a mass gravesite of enslaved people in St. James Parish, a predominately Black area outside of Baton Rouge and New Orleans. The plan is supported by Louisiana Governor John Bel Edwards (Mitchell, 2021). Protecting communities like St. James requires immediate action. Policy makers and local government officials need to understand how the social needs of Black communities must be met in order to prevent the deadly consequences of racism.

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