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June, 2021

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Humanity & Society

1-25

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DOI: 10.1177/01605976211013284

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Abstract

The paper describes, in historical and international perspective, the ongoing struggles of several communities in Louisiana and South Africa whose environment and public health have been damaged by the operations of the same transnational corporations. Previous research has tended to assess environmental injustice one community at a time. Missing from past research is an international perspective which exposes the ties between communities that host the same transnational corporations. For each of our case study communities, we illustrate the national and international policy gaps that have allowed powerful companies to systematically target vulnerable communities for profit. Because of the international dimensions of this problem, resolving it by local or national action alone is impractical. We argue that one of our case study communities represented a turning point in the international movement for environmental justice. The community of Mossville, Louisiana formally asked the United Nations for relief from years of environmental assault on the basis that their human rights had been violated. The paper shows how the decision of the Inter-American Commission on Human Rights, which recognized

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the human rights of Mossville residents, came closer than ever before to realizing environmental human rights for people around the world.

Keywords

environmental justice, human rights, environmental permitting, transnational corporations, Louisiana chemical corridor

Personal Reflexive Statement

Mossville, Louisiana, with a history extending back to the end of slavery when former slaves bought land to farm, is now nearly non-existent. It has been mostly replaced by the Sasol plant—the bittersweet result of years of non-stop organized resistance by residents and their allies. What's past is prologue in Louisiana as it continues to be the home of dangerous, noxious, and polluting industries. In an era of climate change and green energy movements, Louisiana is going in the wrong direction and its citizens will continue to suffer the consequences.

Introduction

There is a quiet revolution occurring in the small, mostly African American communities within the Mississippi River Chemical Corridor, where 150-plus petrochemical facilities occupy former plantations and co-exist with descendants of slavery. There is hope that this revolution might end the oppressive combination of environmentally detrimental infrastructure and vulnerable communities (Duke University n.d.).

The emergence and effect of the Chemical Corridor has been well documented by Lerner (2006), Allen (2003), Singer (2011), and other scholars. They paint a picture of a region home to a predominately Black and low-income population who established new lives after Reconstruction, only to have their environment endlessly invaded by national and international corporations. As the state supports the industry with lax environmental regulation, the population experiences disproportionately poor health outcomes. The EPA reported that the top five census tracts with the highest estimated cancer risks nationally are in the Chemical Corridor (EPA 2015), with chloroprene as the largest contributing toxic. An earlier cancer analysis of the Chemical Corridor by James et al. (2012) found a 12 percent higher cumulative cancer risk for residents of low-income census tracts compared to high-income tracts. Cancer risk in areas with predominantly Black populations was 16 percent higher than in white-dominant areas. Formaldehyde and benzene were the two largest contributors in that study.

This paper breaks new ground by viewing this problem from an international perspective. We trace the environmental struggles of residents in selected towns

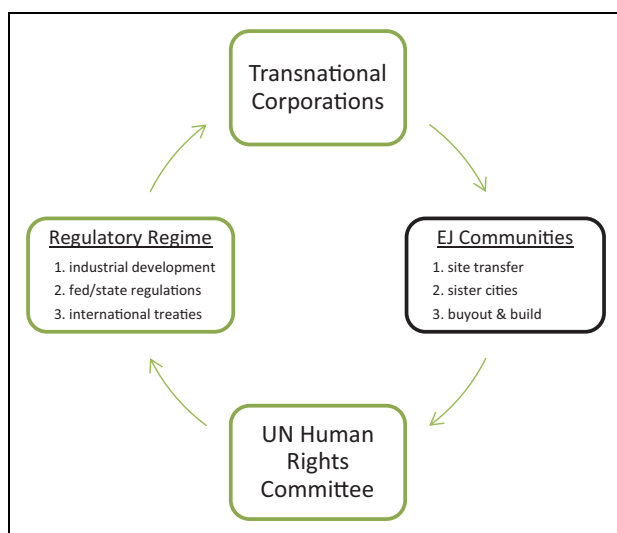


Figure 1. Conceptual framework.

along the Chemical Corridor from the post-World War II period to the mid-2010s. Using contemporary historical analysis methods, we interpret these struggles as part of a larger movement toward environmental justice and we recognize the evolution of that movement from the local to the national to the international stage. Our three selected towns reveal three specific tactics used by transnational corporations to participate in the environmental injustices of the Corridor: site transfer, sister cities, and buyout and build. The argument connects these corporate tactics, the experiences of the towns, and the environmental regulatory system—both national and international. The narrative raises the prospect of transforming the current permit-based environmental system into a system supported by international human rights law. The paper is written for environmental justice communities for the purpose of revealing some of the corporate tactics and maneuvers that can be used against them.

Figure 1 is a visualization of our framework. We will use historical evidence to support the idea that Louisiana's regulatory regime was designed to attract polluting industry through weak regulation and a permit-based emissions structure. This regulatory regime was further weakened by the United States' unwillingness to sign the Basel Convention, an international treaty that specifically regulated the environmental activities of transnational corporations. Louisiana's arrangement was attractive to transnational corporations, who targeted vulnerable communities in the Corridor with a variety of tactics. We introduce three of these tactics in detail by way of in-depth case studies in three of the Corridor communities. We call this phenomenon "transnational targeting." We then describe the pioneering actions taken by one of

the case study communities who sought assistance at the international level from the United Nations Commission on Human Rights. Figure 1 should be kept in mind as each segment of the framework is explored.

The narrative begins with a chronological background on industrial development, environmental regulation, and environmental justice in the Corridor, which sets the stage for a literature review on the international dimensions of the environmental justice problem and the role of international treaties. Three case studies describe, in context, the schemes used by transnational corporations to target environmental justice communities in the Corridor. Following the case studies, the narrative spotlights one of these communities to examine their experience taking the environmental justice struggle to the international stage at the United Nations Human Rights Committee. We conclude with the hope that environmental injustice will soon be established as a violation of international human rights law. Until that time, case studies, such as the Louisiana experiences highlighted herein, remain an important educational tool in the environmental justice movement.

Background and Problem Statement

Unchecked industrial development is at the root of the problem. From the post-1940s to the pre-1970s Louisiana experienced a period of industrial development coupled with an increase in environmental pollution. Louisiana has long been a battleground for environmentalists and is credited with some of the most egregious and caustic struggles of the environmental justice movement. Its location along the Mississippi River, coupled with its abundance of oil, natural gas, saltwater, and sulfur, made it a natural fit for the proliferation of oil refining and petroleum processing plants (Davis 1984; Allen 2006:114). In addition to abundant natural resources, politics and a social structure mired in a history of slavery, Jim Crow laws and segregation were weaved into the fabric of the Mississippi River Chemical Corridor (Colten 2006).

For all these reasons—politics, natural resources, topography, and social structure—the state of Louisiana is an ideal case study for examining transnational targeting of vulnerable communities. The political climate that evolved out of a plantation structure created a hierarchy that continues to empower petrochemical industries as an elite class that controls government and finances (Allen 2006:114). An alignment emerged between planters, state government and outside interests in favor of oil refining and petrochemical processing. As described by Louisiana Public Broadcasting:

These capital-intensive facilities were heavily recruited by state and local governments as a means to stimulate economic development. Companies—virtually all headquartered outside of Louisiana—were attracted by river access, good water and road transportation and access to feedstock—the base chemicals used in various manufacturing processes (LPB 2012).

Allen (2006:114) described the main elements of a cooperative agreement that was written to support industry in Louisiana: guaranteed low taxes, low wages, a non-union labor force, and lax environmental regulation. Wright (2005:90-92) found that by locating closer to African American communities, industries in the Corridor had relegated many of the state's residents to a life of poverty and poor health while contributing to destruction of the natural environment. Bullard (2000) concluded that the disproportionate pattern of toxic facility siting reflected racism and classism that was endemic to the South. A comprehensive investigation by the Environmental Protection Agency (Perlin et al., 1999; and Times-Picayune 2000) determined that blacks and poor people lived statistically closer to the plants and had a statistically higher number of plants within two miles. Many later studies re-confirmed the pattern of disproportionate facility siting and disproportionate burden of pollution (McKenna 2018; Mikati et al., 2018). This state of affairs resulted in a plethora of cases to examine.

While economic exploitation combined with discriminatory plant siting are primary factors contributing to environmental injustice, the use of a "permit" approach to environmental regulation in the US is a contributing factor. In the 1960s and 1970s, national outrage over environmental destruction and public health impacts led to the environmental movement and the passing of foundational environmental laws (e.g., the Clean Water Act and the Clean Air Act). Like several other states, Louisiana was weak on the environment and public health because of its strong ties to industry. The new national environmental laws established a process-based regulatory system but did not ban environmental pollution or set binding limitations on emissions and discharges. While some states passed laws to better protect the environment, Louisiana did not. In fact, Louisiana passed laws to incentivize industry and encourage expansion (Bartlett and Steele 1998). As a result, Louisiana's Mississippi River Corridor continued to grow despite the new permitting and licensing requirements.

Disproportionate enforcement of siting, permitting, and licensing was practiced as a way around the new rules (Bullard 1996). Tax exemptions, subsidies, and lax enforcement of environmental regulations were successfully used to entice more industries to the region (Bartlett and Steele 1998). The most vulnerable communities were targeted, in line with historic patterns of siting discrimination. During this period of growing national environmental regulation, Louisiana continued promoting unchecked industrial development despite the parallel growth of permit-based environmental regulation.

A third key factor that contributes to environmental justice is weak regulation of international environmental laws. In the 1970s and 1980s there were few, if any, international environmental regulations to control transboundary shipments of waste, even as transnational and multinational corporations (TNCs and MNCs) were growing rapidly. TNCs and MNCs were positioned to take advantage of this loophole. They could identify countries and regions that lacked environmental laws and use them as dumping grounds. There were no consequences for transnational

targeting because there was yet no legal basis for regulating international environmental activity, and no legal basis for recognizing environmental crimes (Clapp 2001:53).

It is no accident that transnational targeting from the 1970s through the 1990s occurred primarily in industrial sectors with the most concentrated models of ownership. These included the chemical and oil sectors where a few major corporations dominated 35–40 percent of the global market; along with the electronics and steel (50 percent) and motor vehicle (60 percent) sectors (Greer and Singh 2000). Transnational and multinational corporations in these same sectors exerted tremendous influence over national and international politics, and they successfully lobbied to modify treaties and policies to their benefit (Greer and Singh 2000). Greer and Singh (2000) characterized the ability of transnationals to alter the outcome of the 1992 United Nations Conference on Environment and Development as “the most striking example to date of organized corporate lobbying on the world stage” (Greer and Singh 2000). This was a period defined by the internationalization of environmental pollution issues. For Louisiana, this period brought international industrial firms to the doorsteps of many small Mississippi River towns.

Literature Review

The Mississippi River Chemical Corridor is an 85 mile stretch of land between New Orleans and Baton Rouge that is lined with 146 petrochemical processing plants and 27 petroleum refineries. Additionally, the same types of facilities extend further upriver into Calcasieu Parish in Lake Charles, Louisiana, also known as the Calcasieu Industrial Corridor. These corridors, in combination, transformed the region from rural farm communities to that of brick houses and shopping centers. By 1987, the state of Louisiana Total Toxics Release was 1,725,933,233 pounds of toxins into the air, water, and soil (U.S. EPA 1989:6). That was more than most states released (U.S. EPA 1989:6). In 2012, the MRCC and the Calcasieu Corridor released nearly 150 million pounds of pollutants into the air, water and soil (U.S. EPA 2013). The people who live in these communities for decades have been inundated with toxic emissions and have experienced high rates of cancer and other physical maladies, which they attribute to the emissions.

The development of sweeping environmental laws in the 1970’s failed to address the massive pollution of the Corridor. Realizing that environmental laws were not protecting them and that their neighborhoods were being targeted for more plants, people-of-color, poor people, and their allies organized to fight for equal environmental protection. In the 1980s and 1990s, an environmental justice movement emerged in response to disproportionate enforcement of environmental laws. They employed campaigns like those of the mainstream environmental movement (e.g., media pressure, alternative scientific reports) and they adopted strategies from the civil rights movement (e.g., first-hand accounts, community organizing). They took up the term “environmental justice” to describe the goal of their movement. The

mainstream environmental NGOs played a major role in national and global environmental activism, but only a few of the mainstream groups interacted with the burgeoning environmental justice movement, which often focused on local issues

As the environmental justice movement was burgeoning in the Corridor, environmental problems were simultaneously expanding globally. New environmental treaties and conventions were enacted from the 1970s onward to deal with the emerging international dimensions of the problem, such as climate change, the ozone hole, deforestation, and biodiversity. With the growth of multinational and transnational corporations and with the emergence of global environmental issues, international environmental concerns came to the fore. A total of 2,063 multinational and binational environmental agreements (i.e., treaties, conventions, protocols, declarations, amendments, and agreements) were signed between 1970 and 2012 (Mitchell 2014).

A few of these agreements directly addressed environmental justice issues, and of these, the Basel Convention was considered one of the most important. Under President George H.W. Bush, the US refused to sign on to the Basel Convention, thereby maintaining a loophole that would be enjoyed by transnational and multinational corporations for over 25 years (Yang and Fulton 2016). By avoiding regulation via the Basel Convention, transnational corporations could produce environmental injustices by disproportionately locating their facilities in communities of color within the US.

The 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal prohibited the import or export of hazardous waste (radioactive waste excepted), especially to developing countries or to countries where “the wastes in question will not be managed in an environmentally sound manner” (Mitchell 2014). The Basel Convention remains the leading multilateral agreement controlling the international movement of hazardous waste. Importantly, a long list of excepted wastes, including those deemed as “scrap,” were excluded from the convention, and the United States—the world’s largest waste producer—signed but refused to ratify (to this day) the treaty. Just as disproportionate enforcement of EPA regulations facilitated environmental injustice in the Chemical Corridor, loopholes in the Convention facilitated environmental injustice on an international scale that would eventually reach Louisiana.

In response to the “scrap” recycling loophole, the 1991 Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa specifically banned the import of hazardous wastes into and within Africa and deemed such importation a criminal and illegal act. Other such regional bans were enacted by Central America, the Mediterranean and South Pacific regions, the Commonwealth of Independent States (Russia, etc.), and others. A 1995 amendment to the Basel Convention proposed enacting an outright ban on transboundary shipments of hazardous waste from developed to developing countries, including a ban on shipments of scrap waste for recycling; however, the amendment never had enough votes to pass. In response to

the radioactive waste loophole, the 1997 Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management established an administrative, legislative, and regulatory framework to ensure safety during all stages of spent fuel and radioactive waste generation, processing, storage, transport, and disposal (civilian only).

Another response to the inadequacies of the Basel Convention was the Aarhus Convention, officially titled the 1998 Convention on Access to Information, Public Participation in Decision-Making, and Access to Justice in Environmental Matters. The Convention declared access to environmental information as a right of everyone, including information on policies and actions related to human health and safety as they are linked to the environment. The right of everyone to participate in environmental decision-making and the right to challenge public decisions made in violation of either of the first two rights were also declared. The European Union and 45 individual states in Europe and Central Asia are parties to the Aarhus Convention (Steger 2007). This agreement was unique because it adopted a rights-based approach that laid the groundwork for comprehensive environmental justice protections, which raised the question of why states act so differently in environmental matters.

In practice, it is difficult for countries to agree on environmental goals because their different historical, economic, and political realities create divergence (Rajamani 2006). The key source of divergence is each country's economic position in a structured world economic system and the fact that actions taken on behalf of environmental cooperation might weaken a country's economic position. DeGarmo (2013) notes that:

Even though the international environmental movement gained strength and momentum in the 1970s and beyond, many scholars of the classical realist tradition maintained that in an anarchic system, the sovereign state is the most serious roadblock to achieving the cooperation necessary to address international environmental concerns. (DeGarmo 2013:13)

Rajamani (2006) recommends “differential treatment”—that is, different targets and timetables for different countries based on their capacity and culpability—as the best available strategy for taking account of divergence among countries.

In response to the failure of environmental regulatory regimes locally and globally, the 1990s and 2000s were a period of expansion for environmental movements. Recognizing first the limitations of the initial set of international treaties, second the growing importance of global environmental challenges, and third the interdependence of development and environment as discussed at the 1992 Rio Summit, mainstream environmental NGOs from the United States paid increasing attention to international climate change issues as environmental justice-oriented groups organized a global climate justice movement.

The reach of international treaties was limited to signatory countries, and compliance with the treaties was always difficult to enforce. Because different countries were at different levels in terms of development, some countries acted as Louisiana officials did during the 1950s, emphasizing unchecked industrial development over protection of public health and the environment. Other countries, mainly in Europe, entered into additional multinational and bi-national agreements that attempted to address some of the defects in the existing environmental regulatory regimes and to shift toward approaches that embraced sustainability (Kersten 2009:178). Notwithstanding the increased number of environmental treaties and conventions, vast differences between country levels of development and environmental protection generated an abundance of loopholes for TNCs and MNCs.

Simultaneously, across the United States, environmental justice battles intensified after the signing of Executive Order 12898—Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, by President William J. Clinton on February 11, 1994. Individual cases were elevated to the court system to challenge how far the environmental regulatory system would or should go to protect communities of color and poverty. Many of these same environmental justice groups were involved in international climate gatherings held by the United Nations. Their presence and their interactions with similar groups from other countries strengthened and broadened their agenda. Consequently, both mainstream and environmental justice groups established international fronts during the 1990s and 2000s.

This period is characterized by the emergence of climate change and climate justice as leading issues on the environmental agenda, as well as a broader understanding of environmental problems being tied up with economic and equity problems. For Louisiana, this is the period where environmental justice groups felt empowered to challenge anything, and where most of the “wins” occurred for individual communities. However, there was no larger victory because the Chemical Corridor remained in place and continued to grow even as new environmental regulations emerged. The waste was now better permitted, monitored, and counted using the best techniques, but at no point was a limit placed on how much could be dumped or emitted. This was a consequence of the federal permit-based regulatory system.

Case Studies

Despite the expanding number of international agreements and the increasing role of environmental movements, transnational and multinational corporations still manage to employ practices that harm public health and the environment. Powerful corporations can take aim at the most vulnerable whose rights may not be fully protected by either their home country’s laws or by international agreements. Transnational (TNC) and multinational (MNC) corporations have found ways to target vulnerable populations despite past efforts to control transboundary dumping of hazardous waste and other unscrupulous practices through international agreements. With areas like the

Chemical Corridor in existence, TNCs and MNCs can target vulnerable communities even within the heavily regulated United States. To illustrate the range of options available to TNCs and MNCs, we describe three methods used to target communities for the siting of a TNC or MNC facility: 1) sister cities, 2) site transfer, and 3) buyout and build. These targeting methods represent just three ways that TNCs and MNCs can establish facilities in locations with minimal restrictions on their operations.

Case 1

In the first targeting method, which we call “sister cities,” a transnational or multinational firm operates compatible operations in two cities—one in an industrialized country and the other in a developing country. The names of the two operations may or may not be the same. As intended, the TNC ships hazardous wastes produced in the industrialized country to their sister operation in the developing country, which minimizes the net cost of meeting strict hazardous waste regulations in the industrialized country. This option is cost efficient and practical for the TNC because developing countries with weak regulatory systems are typically selected to receive the waste. But this scenario also has environmental justice implications. TNCs have used this targeting method to take advantage of poor people in developing countries, who are primarily people of color, and to create disproportionate pollution exposures between people in different socioeconomic situations. This targeting approach also leverages clustered industrial developments (i.e., areas where no individual facility can be held accountable and where cumulative health impacts are difficult to calculate), permit-based regulatory systems (i.e., systems that have no limit on total pollution, only on individual emissions), weak environmental enforcement within the country (e.g., low fines), and weak regulation of waste shipped internationally.

Sister cities case. The cities of Geismar, LA and Cato Ridge, South Africa were targeted by transnational corporations in a tactic we identify as “sister cities.” In this approach, a single TNC operates facilities that contaminate cities in the US and abroad. Geismar is a small, predominately African American community (70 percent of the population) with 18 chemical plants in a 21.6 square-mile area, including Rubicon, Liquid Carbonic, and Borden Chemicals and Plastics (one of the state’s leading polluters). Typically, 200 million pounds of toxins are discharged into Geismar’s air, water, and soil each year (the most in the state), creating a major public health risk (U.S. EPA/TRI Explorer 2012; Reed 1991). Several Superfund sites, landfills, and periodic explosions and fires have also contributed to the pollution and health concerns of Geismar residents. Residents and health officials report high rates of cancer, miscarriages, as well as environmental damage to plants, buildings, and vehicles. Unbearable odors, white dust, and fine mists are commonplace (Reed 1991). As early as 1984, residents of Geismar began organizing against the polluting of their neighborhoods and the environment.

On October 27, 1994, the US government (under President Clinton) filed a civil action against Borden Chemicals and Plastics Operating Limited Partnership and two related Borden entities. The civil action forced the company to clean up a release of cancer causing and other hazardous contaminants in the ground water at its facility in Geismar, Louisiana (EPA 1994). The civil action also sought penalties for the illegal shipment of hundreds of thousands of pounds of hazardous wastes to South Africa and the operation of unpermitted hazardous waste facilities including an incinerator. The lawsuit, filed under federal hazardous waste and clean air laws, forced the company to comply fully with all environmental statutes (Bartlett and Steele 1998).

Filed under the Resource Conservation and Recovery Act (RCRA), the complaint against Borden Chemicals and Plastics included a “corrective action,” forcing the company to evaluate the extent of the damages and cleanup of contaminants released into the groundwater at the Geismar facility (EPA 1994). These contaminants included vinyl chloride, a known carcinogen, and ethylene dichloride. The Department of Justice accused Borden of operating a hazardous waste incinerator and other hazardous waste units without RCRA permits (Department of Justice 1998).

The Clinton administration felt strongly that on the matter of pollution, the United States should not be party to the poisoning of people in other lands. The United States accused Borden of shipping over 300,000 pounds of hazardous wastes to a Thor Chemicals facility located in South Africa without notifying EPA as required by RCRA. These actions had prevented EPA from properly verifying that (1) Borden had identified the shipments as hazardous waste and (2) South Africa had consented to accept the hazardous wastes. Borden classified the shipments of hazardous waste as waste for recycling, but this was only a ruse. Borden admitted there were approximately 2,500 barrels containing mercury and vinyl chloride wastes at the Thor facility with Borden labels. South African officials defined the waste as a raw material for recycling, and legally accepted the waste for incineration at the Thor plant (Clapp 2001).

In 1994, then EPA Administrator Browner exclaimed: “Environmental pollution does not stop at U.S. borders, and we will use all of our enforcement authorities against those who engage in the illegal international hazardous waste trade” (EPA 1994). The petition also alleged that Borden failed to meet Louisiana’s standards for controlling particulates in the air. These emissions can affect breathing and accelerate existing respiratory and cardiovascular disease. Lastly, the Department of Justice accused Borden of violating the Federal Comprehensive Environmental Response, Compensation and Liability Act by failing to immediately notify authorities in 1990–1991 of releases of thousands of pounds of hazardous chemicals, including vinyl chloride and ammonia.

In 1998, EPA settled a lawsuit with Borden Chemicals and Plastics for \$3.6 million dollars in penalties and set asides for the cleanup of groundwater pollution at the Geismar plant and investigation of the City of Geismar drinking water aquifer which ran under the plant (Department of Justice 1998). Only two years later, on November

2, 2000, Borden Chemicals announced it would shut down its methanol plant in Geismar, Louisiana the following January (Kanalich 2000). The company reported that it would continue to operate the facility until that time to meet customer demand and operating requirements. Borden Chemicals and Plastics Operating Limited Partnership and its general partner BCP Management filed for bankruptcy in 2003 (U.S. Securities and Exchange Commission 2003).

The actions of Borden Chemicals and Thor Chemicals intersected in Cato Ridge, South Africa, where residents and the environment were poisoned with mercury (Tesi 2000:114). Some of that mercury came from the Borden plant in Geismar, and both plants would ultimately be shut down for their life-threatening operations. It is important to note that Borden was stopped by strong federal level enforcement, in lieu of the still unratified Basel Convention. This approach is only possible with a willing administration.

Cato Ridge, South Africa is a small industrial village in the province of Kwazulu-Natal (Jones 1994). In the early 1980s, Thor Chemicals Inc. (an MNC) moved its mercury facility from England to Cato Ridge under threat of investigation by British authorities for dangerously high levels of mercury in its plant (Steady 2009:196). The company also changed its operations from production to reclamation and recycling. As one of few mercury incineration facilities in the world at the time, Thor's Cato Ridge plant accepted hazardous mercury wastes from around the world. The acceptance of world-wide waste resulted in massive profits and massive environmental pollution. Thor also profited from an unskilled workforce and lax environmental regulations (Jones 1994). Borden Chemicals of Geismar, LA was one of the TNCs that sent its mercury wastes to the Cato Ridge plant in South Africa from the mid-1980 to the mid-1990s. It is important to note that the Basel Convention was created (in 1988) to put an end to this kind of activity. As previously discussed, the US did not ratify the Basel Convention thus allowing a trade in hazardous waste that harmed people and the environment in both Geismar and Cato Ridge, hence the term "sister cities."

Thor had few competitors because it was the only company in the world to develop a large-scale mercury reclamation process. Thor also utilized incineration as its primary method for the disposal of mercury. Most countries had abandoned this process in the 1980's because it released dangerous toxics (e.g., dioxin) into the air and resulted in a contaminated ash by-product. At a time when many companies were grappling with what to do with mercury wastes, Thor provided a needed service, thus Cato Ridge became the dumping ground for mercury wastes from companies around the world (Clapp 2001:62-64).

Thor's environmentally destructive practices were uncovered in 1989 when, as part of the investigative news story *Toxic Waste Trafficking*, a United States journalist exposed the severity of the pollution problem in Cato Ridge. Water samples from the Mngweni River, a major drinking water source, contained mercury at levels "1,500 times higher than the United States toxicity limit" (Lambrecht 1989). Mercury levels up to 40 miles downstream were 20 times the United States

safe limit (Lambrecht 1989). Doctors diagnosed at least 30 plant workers with mercury poisoning, resulting in two deaths and a coma (Clapp 2001:63).

After the deaths of two workers by mercury poisoning in 1992, Earthlife Africa and Greenpeace worked to raise awareness and challenge the government in its failure to protect the environment and human health by allowing Thor Chemicals to import hazardous wastes. They accused the government of being complicit with Thor in covering up the pollution. They presented the government with a “smoking gun” when leaked documents reported mercury concentrations in the urine of plant workers between 600 and 1,000 parts per billion while the international standard was 50 parts per billion (Jones 1994).

Thor announced the closing of its mercury plant in 1992 (to become effective in 1996), after a long battle and numerous lawsuits (Burrell 1997). Thor settled cases in 1994, 1997, and 1998 alleging mercury poisoning out of court, which allowed them to avoid admitting guilt. South African law at the time prohibited citizens from suing employers and did not require full worker protection. It was clear that Thor’s liability would have been much higher in a British court. Losing the Cato Ridge battle did not deter Thor from using another very well-known tactic: shut-down and start-up. Thor Chemicals was reborn as Tato Holdings. Shifting its assets to the newly formed Tato Holdings reduced the net assets of Thor from 28 million to 3.6 million pounds, which further limited the amount of money available to pay out to those who had been harmed (Jones 1994; Phalane and Steadly 2009).

Case 2

In a second type of targeting method that we call “site transfer,” a foreign transnational or multinational corporation attempts to establish operations in the United States. To maximize their chances of success, the firm joins an existing industrial zone (or cluster). Even if the selected zone has a well-organized fence line community that is unwilling to accept any further pollution and has the ability to gain widespread support based on an environmental justice strategy, this is not necessarily enough to stop the TNC. The TNC still has additional options. They can simply identify another site in a neighboring community that is not as well organized, set up operations there, and begin polluting in the same region.

While the site transfer strategy is different than sister cities, the same principles exist to facilitate its success: the combination of clustered industries, permit-based regulation, and weak environmental enforcement. The site transfer approach leverages economic inequality. When some areas are much more economically distressed than others, they become targets for industrial sites that, ideally, should be located far from human populations. Clustered industrial development creates its own political leverage, beyond that of any single plant. Also, each plant’s emissions are mixed with the emissions of nearby plants, making it difficult to hold any individual facility accountable for excess pollution. Permit-based regulation applies

emissions standards, technology-based standards, and fines to individual plants, but it fails to set limits on total pollution.

Site transfer case. Convent, LA experienced the “site transfer” targeting method in which a TNC or MNC attempts to establish operations in one site and, when faced with some form of resistance, rather than aborting the development completely the firm quickly finds another less resistant site. Convent is a small rural town of 2,500 located along the Mississippi River in St. James Parish. At the time, Convent residents had an average income of \$7,635, with 40 percent of the population living below the poverty level in spite of the presence of many industrial plants (Oversight 2007).

In the mid-1990’s, Shintech, a Japanese subsidiary of Shun Etsu, proposed to build a plant that would emit 600,000 pounds of toxic emissions and 6.8 million gallons of wastewater into the Mississippi River. Backed by the Louisiana government, this transnational firm sought to locate the largest polyvinyl chloride (PVC) plastics production facility in the world—with little or no sensitivity to the previous history of environmental harm suffered by this community. The siting of the Shintech plant in Convent, Louisiana would have significantly added to the existing toxic burden the community was already enduring. While Convent’s racial balance was nearly 50 percent black and 50 percent white, the site chosen for the construction of the facility was 82 percent black, which made it an environmental justice issue. Convent residents formed a community organization named St. James Citizens for Jobs and the Environment (SJCJE).

The major battles against Shintech revolved around the Louisiana Department of Environmental Quality granting permits to the company. Shintech needed air, water, and land use permits for its operation. The air permit allowed the release of 600,000 pounds of toxic chemicals into the air. The water permit allowed the dumping of 6.8 million gallons of wastewater from the proposed plant into the Mississippi River each year. The land use permit allowed for the construction of the site (Collins 2006:108).

In December of 1996, SJCJE and many collaborating organizations and individuals attended the hearing to protest construction of the Shintech facility in a largely African American part of town. The response was so overwhelming that the EPA Region VI Office recommended that the Louisiana Department of Environmental Quality (LDEQ) consider environmental justice concerns in their permit decision-making process. The pleas and the recommendation went unheeded and on May 23, 1997 LDEQ granted Shintech a Title V air permit (Collins 2006:109). LDEQ had previously granted the land use permit, which left only the granting of the water permit to pave the way for Shintech to move forward with its building plans. The community’s strategy at this point was to continue bringing attention to their cause by sharing research on disproportionate exposure and by making legal challenges aimed at enforcing the Environmental Justice Executive Order #12898 (Collins 2006:109).

The May 1997 Title V air permit for the Shintech facility was for chlor-alkali, polyvinyl chloride, and vinyl chloride monomer (Collins 2006:109). For LDEQ the issue of environmental justice was not relevant to the issuing of permits (Timmons and Toffolon-Weiss 2001). As such, the agency did not expect the community's response to their permitting decision. With assistance from the Tulane University Environmental Law Clinic, SJCJE filed a petition with the EPA requesting that the agency veto the issuance of the Title V operating permit based on the prescriptions of the Environmental Justice Executive Order #12898 (Timmons and Toffolon-Weiss 2001). This was a bold, innovative, and untested legal strategy at the time.

While the EPA was, and is, authorized to review the operating permits granted by any state, it was rare for the agency to override a state's permitting decision (Timmons and Toffolon-Weiss 2001). The EPA had never rejected a Louisiana environmental permit, so it was a surprise when in September of 1997 the EPA agreed with one of the technical objections raised in the petition, which then required the re-opening of the Shintech air-permitting process. Further review of the permit by the EPA revealed another 49 technical deficiencies in the application. Despite this breakthrough, the EPA ultimately denied the petitioners' environmental justice claims saying: "Petitioners have not shown how their particular environmental justice concerns demonstrate that the Shintech permits do not comply with applicable requirements of the Clean Air Act (Shintech 1997)."

SJCJE also filed a Title VI complaint contending that Shintech violated the Federal Clean Air Act by ignoring its impact on a minority community already overburdened with pollution. The complaint also alleged that the public comment and hearing process discriminated against minorities and that LDEQ biased its decisions in favor of Shintech. These complaints did not change the outcome.

As the permitting fights raged on, many environmental justice advocates argued that the permitting process in effect at the time did not take into consideration the cumulative or synergistic effects of toxics emitted by several facilities operating at the same time. Having no salient response to this argument, EPA decided to have its Science Advisory Board study the methodology used in the Agency's analysis for making permitting decisions, which only delayed the process.

The struggle against Shintech's permits went on for at least two years during which time the EPA attempted many different solutions that ranged from emission trading to reduce the overall emissions in the area, to mediation between the parties, but all to no avail (Collins 2006). It became a "take no prisoners" conflict played out in public view. Shintech quietly decided to abort the Convent plant with no discussions or threats from either side. On September 17, 1998, Shintech officials announced that the company was backing out of the deal (Collins 2006). EPA had not completed its scientific review of the permitting process, so no final decision about the permit was necessary. The community felt victorious.

Shintech simultaneously made another decision, however. With the announcement that Shintech had chosen another location for its facility only 25 miles upriver from Convent, citizens discovered that Plaquemine, LA (in Iberville Parish) had

been selected, a small rural town of about 7,100 people (Lyne 2005). While this plant would be smaller than the one proposed for Convent, the 1,725-acre site would still be the largest investment ever in the United States by a Japanese chemical manufacturing company. The proposed plant would create 150 full time jobs and pay between \$55,000 and \$60,000 per year. An additional 50 contract jobs and 2,000 construction jobs to build the plant were expected.

Shintech carefully picked the second location for its plant. Based on their experiences with the Convent community and the reach of the Environmental Justice Executive Order, they developed a different approach to siting in Plaquemine. They engaged the community in the siting process before the permitting stage. Shintech officials were adamant that Plaquemine residents would see their company in a positive light as opposed to the negative perceptions of Convent residents.

Shintech had an existing plant in Addis, Louisiana that it used as an example of the positive effects that their company could have on Plaquemine. Addis is located about five miles from Plaquemine. The community is more affluent and environmental justice had not been an issue in Addis (Lyne 2005). While environmental groups fought, as in Convent, to stop the building of the plant, Plaquemine was not as well organized or as motivated as Convent (Lyne 2005). Successful interventions to stop the plant did not occur. In 2008–2010 alone, the State of Louisiana gave Shintech \$169 million in property tax exemptions, industrial tax credits, and enterprise zone grants (Story 2012).

Because the United States established a process-based regulatory system that did not ban environmental pollution or set binding limits on emissions and discharges, the permitting process could not stop the Shintech Company. Moreover, while the Environmental Justice Executive Order gave great impetus for community action, attempts to tie environmental justice concerns to the technical aspects of the air permit were unsuccessful. Nevertheless, that the possibility could be invoked moved Shintech to abandon its plant in Convent (Story 2012). Fortunately for Shintech, within the Corridor there was another ideal site just upriver.

Transnational, multinational, and national corporations can easily target communities that are not well organized or well versed in the areas of environmental pollution (Heiman 1996). The company can transfer its operation to such a community when they encounter heavy, nearly insurmountable resistance from the community originally selected for siting. This tactic is called site transfer.

Case 3

In a third option that we call “buyout and build,” a foreign transnational or multinational corporation identifies a large industrial site in an industrialized country. If the selected site has a well-organized environmental justice community and the “site transfer” option is not preferred, then the corporation simply proposes to purchase all of the structures within the well-organized community so that their project can proceed at will. Neighbors with less social capital (e.g., less organized, more

dependent, etc.) who are not included in the buyout are then left with increased pollution, lower property values, and no voice in the process. While one might applaud the buying out of residents who would be unhappy with the proposed project, this scenario is still another example of environmental injustice. Such a project creates disproportionate exposure to hazardous pollutants for people who remain in the area. This approach leverages clustered industrial development (i.e., cannot hold any individual facility accountable), a permit-based regulatory system (i.e., no limit on total pollution), and weak environmental enforcement (i.e., no consequences).

Buyout and build case. Mossville, LA experienced a transnational tactic we call “buyout and build,” where a TNC or an MNC proposes to purchase existing structures in an area the corporation wants to develop. Mossville is an unincorporated community in Calcasieu Parish, Louisiana that was founded in the 1870s by African Americans with a vision of creating a place where their children could live and prosper in a safe haven from racial hostility (Shabazz 2012). The natural environment allowed even the poorest families in Mossville to live well by fishing, hunting, and farming for private consumption and small business. At its peak the town had a population of 3,000 families (Shabazz 2012).

The community is surrounded by no less than 14 industrial facilities that include oil refineries, petrochemical manufacturers, and a coal fired power plant within one-half mile of the town (MEAN 2005). Nine of these facilities report spewing over 1,000,000 pounds of toxic chemicals into the air each year (MEAN 2005). Local industries have contaminated the fish and polluted the lakes and bayous (MEAN 2005). The chemicals released by nearby industries are known to damage human health by causing cancer, attacking the reproductive system, creating learning and behavioral disorders, weakening the immune system, and harming internal organs (MEAN 2005).

This small African American community managed to buy property and live a subsistence lifestyle that depended heavily on the quality of the natural environment (MEAN 2005). Before the plants moved in their environment had been pristine (MEAN 2005). Nevertheless, the residents were eventually sacrificed by their government’s partnership with extractive industries that would eventually degrade the environment and their community. As of 2012, Mossville had only 310 families living in homes that were passed down from one generation to the next through the hard work and determination of their ancestors (Shabazz 2012).

The community was completely inundated with petroleum, chemical, and plastics manufacturers (MEAN 2007). Community residents were convinced that their health was at risk because of their proximity to these dangerous polluting facilities. A major concern was exposure to dioxin, a deadly toxin and carcinogen. For many years, the Mossville community complained of illnesses, sickness and death perceived as attributable to exposure to chemicals emitted by facilities in their neighborhoods. They asked local and federal governments to investigate, and

specifically requested that the Agency for Toxic Substances and Disease Registry (ATSDR) investigate their complaints. In 1998, ATSDR conducted a study on dioxin exposure in Mossville (MEAN 2005). After collecting blood samples from residents, the agency concluded that the findings were inconclusive and that the source of the dioxin exposure was unknown. This conclusion was drawn by ATSDR when in fact the Mossville community had the largest concentration of vinyl production facilities in the United States (ATSDR 1998). Production of polyvinylchloride (PVC) at these facilities creates dioxin as a byproduct that ends up polluting the air, water, soil, and groundwater. After repeated health studies and health surveys conducted by ATSDR and others, including Mossville Environmental Action Now (MEAN) which analyzed the ATSDR studies, a link was finally discovered. A unique dioxin compound emitted by a local plant was found in the blood of Mossville residents (Cahill-Jackson 2012:179). The situation in Mossville became so dire that residents decided they should leave their homes. They have been fighting for relocation since the mid-1990s, when many families were relocated after a terrible industrial accident leaked ethylene dichloride (EDC) and contaminated the ground water. The company was found responsible for the contamination and liable for “wanton and reckless disregard for public safety” (MEAN 2008).

Mossville residents renewed their call for relocation in 2012 when they were informed that Sasol, a South African-based transnational corporation, was buying up property to expand its facility. The company proposed the largest ethane cracker and gas-to-liquids petrochemical plant in the United States. The facility would cover three square miles at a cost of between \$16 and \$21 billion. This would represent the “largest single manufacturing investment in the history of Louisiana and one of the largest foreign direct investment manufacturing projects in U.S. history” (Doyle 2015). The Sasol Company did not disclose the expected pollution increases or the potential risk of a hazardous accident from the proposed plant, but environmentalists had already tagged it as a great polluter that would increase the toxic footprint of the corridor.

With heightened fear of industrial expansion, residents pressed harder for relocation when it was learned that Sasol had purchased an old elementary school and an old church nearby for its expansion. An ever-encroaching legion of chemical facilities moving closer and closer to one’s home is a horrid thought, especially when one considers the historical backdrop of this community (i.e. industrial accidents, cancer, sickness and death). Mossville residents knew, based on experience, that it was only a matter of time before they would be faced with more pollution in even closer proximity to their homes.

In 2013, Sasol introduced the Voluntary Property Purchase Program in Mossville. The program paid homeowners reasonable prices for their homes. Because of the magnitude of the pollution and the extent of the health problems, homeowners were unlikely to ever be able to sell their property. Consequently, there was great interest in the buyout program. Mossville residents’ dream of relocating away from their poisoned community finally became a reality. The largest of its kind in the world, the

plant was constructed on top of the former town of Mossville. The Sasol plant began to spew hundreds of thousands of pounds of pollutants into the region and continued the Cancer Alley tradition of environmental injustice for those who remain (Malek-Wiley 2013).

Discussion—A Question of Human Rights

Like other communities in the Chemical Corridor, Geismar, Convent, and Mossville were targeted by transnational and multinational corporations because of the “perfect” combination of government subsidies, lax enforcement, abundant natural resources, and an environmental system that allowed unlimited industrial activity as long as permits were in compliance. The United States’ rare use of criminal penalties for environmental crimes, the lack of a legal limit on the total mass of pollution allowed, and the non-existence of rights to a healthy environment enable environmental injustices to continue. These targeting tactics are in constant use and they should be named and defined as we have done here, for the benefit of other environmental justice communities and the scholars who study them.

In the process of fighting for relocation over decades, the organized residents of Mossville quietly began to implement a new rights-based strategy for environmental justice. Having exhausted all remedies, the Mossville Environmental Action Now (MEAN) partnered with a local non-profit, Advocates for Environmental Human Rights (AEHR), to sue the US government on human rights grounds. This was a new tactic in Mossville’s struggle for environmental justice, but not new for AEHR. Previously in New Orleans, AEHR had led a “right to return” movement to advocate on behalf of people displaced by Hurricane Katrina, most of whom were African American. They presented information to the UN Human Rights Committee that resulted in the Committee recommending, in 2006, that the United States follow the *Guiding Principles on Internal Displacement* to protect the rights of displaced people (AEHR 2019; UNHCR 1998).

Building on that previous effort, Mossville and AEHR argued that people have the right to racial equality and a clean environment, and that environmental pollution should be controlled as an element of human rights law. Specifically, their petition requested medical services and relocation for Mossville residents, cessation of further environmental permits, and the following reforms to the regulatory system (Global Health and Human Rights Database, 2010):

“Petitioners seek remedies for the violation of their human rights and respectfully request that the Commission, pursuant to human rights laws and standards, recommend to the United States that it:

4. Reform its existing environmental regulatory system to:
 - a. establish in all regulatory programs pollution limits that protect against the multiple, cumulative, and synergistic health impacts of numerous toxic

- and hazardous substances released into the air, water, and land by one or more industrial facilities;
- b. require a safe distance between a residential population and a hazardous industrial facility so that the population is not located within the area where deaths or serious injury would result in the event that a toxic or flammable substance stored, processed, or generated by the facility would be released to the environment through explosion, fire, or spill; and
 - c. remedy past practices and prevent future actions that intentionally or inadvertently impose racially disproportionate pollution burdens (MEAN 2008:9)."

Remarkably, in April 2010 the Inter-American Commission on Human Rights agreed to hear the case, noting that US law provides no legal remedy for human rights that are violated as a result of its environmental laws (Sturgis 2010; and Cahill-Jackson 2012). The Committee later reversed course and decided not to hear the case. Still, we believe this case represented a revolutionary shift in the trajectory of environmental justice. Mossville's struggle has made a broader statement about environmental justice in the context of human rights. That statement is no longer a question; rather, it now exists as a new point of leverage.

The Mississippi River Chemical Corridor emerged as a result of political and economic transactions between government officials and external industries; few were headquartered in the state. Industrial development was almost completely unchecked with little or no environmental regulation, and the financial windfalls only strengthened the ties between government and industry. Mossville, Convent, and Geismar were targeted for this pattern of growth. Each community could only watch as plants moved in one by one, as the environment around them became more and more degraded, and as their health worsened.

People in Chemical Corridor towns are expected to be savvy and well-organized enough to divert a project (as in the Shintech case) or to attract a buyout (as in the Mossville case), or to have the federal government enforce environmental laws (as in the Geismar case). These approaches offer limited temporary relief and fail to address the underlying problem. The targeting methods examined in this paper are still being used by powerful corporations that operate from an endless playbook of tactics. It is impossible for vulnerable communities to know which scenario they may have to react to at any given time. Even if they are well-organized and well-prepared, environmental justice (EJ) communities are typically up against the combined forces of state government, federal government, and transnational corporations who all want development projects to succeed. Even in the face of scientific proof, as in the Mossville case, where the community's health problems were linked to specific polluting facilities, and even with the initial statement by the Inter-American Commission tying environmental laws to human rights, these were not enough to bring justice to the situation.

Conclusion

This paper described three types of moves made by TNCs and MNCs to exploit loopholes in permit-based regulations, to profit from the lack of international treaties, and to benefit from government development schemes and community vulnerability. We categorized these moves as examples of transnational targeting, and we offered three examples while recognizing many moves remain unidentified and unknown. We believe EJ communities should understand the range of tactics they might face and learn from the experiences of other vulnerable communities. Consequently, case studies, such as the Louisiana experiences highlighted herein, remain an important educational tool in the environmental justice movement. The Mossville experience illuminates the necessary future of the environmental justice movement: the international stage. People anywhere who are targeted for egregious environmental harm are abused of their human rights. Until this expression becomes law, little can be done to stop the abuse. Based on previous analyses of case law for similar cases around the world, it was reasonable to expect that the Inter-American Commission on Human Rights would find the US guilty of violating the human rights of Mossville residents (Cahill-Jackson 2012; Hertel and Libal 2011). It is our hope that more EJ communities and their legal allies will take the movement into the next phase and will one day establish environmental injustice as a violation of international human rights law.


Declaration of Conflicting Interests

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

Funding

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

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Supplemental Material

Supplemental material for this article is available online.

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