FACING THE RISING TIDE: CO-OCCURRING DISASTERS, DISPLACEMENT, AND ADAPTATION IN COASTAL LOUISIANA'S TRIBAL COMMUNITIES

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To my husband, Philip Maldonado. To the members of the Isle de Jean Charles Band and Grand/Caillou Dulac Band of Biloxi-Chitimacha-Choctaw Indians and the Pointe-au-Chien Indian Tribe.

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ABSTRACT

Environmental and technological disasters, extractive industries, river mismanagement, and climate change are drastically transforming coastal Louisiana's water- and landscape. Using ethnographic research and theories of structural violence and ecosyndemics, this dissertation investigates the experiences of environmental change and displacement for the Isle de Jean Charles and Grand Caillou/Dulac Bands of Biloxi-Chitimacha-Choctaw Indians and the Pointeau-Chien Indian Tribe.

The objectives of the research were to learn: (1) how people from the three tribes were adapting to environmental change, including making decisions to resist physical displacement or relocate; (2) how people experienced environmental change and displacement; and (3) how environmental degradation intersected with economic, social, and political power structures. The goals were to understand people's experiences of co-occurring disasters and environmental change, what individuals and communities were doing when faced with potential displacement, and what lessons could be learned for communities undergoing similar experiences.

This dissertation concluded that the co-occurrence of disasters, capitalist-based resource extraction and other infrastructure development and practices, climate change, globalization, systematic discrimination, and forced assimilation caused livelihood, health, and socio-cultural effects for both people who had stayed in place and those who had relocated. As the landscape in which residents had carried out their livelihoods and cultural practices, and of which they had multi-generational knowledge and memories, rapidly changed, many people experienced a sense of dislocation even while in place. The data showed how environmental degradation and stateled coastal restoration and flood protection plans reflected and reproduced social inequalities and power dynamics that have turned coastal Louisiana into an energy sacrifice zone. This dissertation includes recommendations about adaptation and community-led relocation to be considered by government agencies, communities facing environmental change and displacement, and researchers.

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LIST OF ACRONYMS

BCCM	Biloxi-Chitimacha Confederation of Muskogees
BIA	Bureau of Indian Affairs
BP	British Petroleum
BTNEP	Barataria-Terrebonne National Estuary Program
CBA	Cost-benefit analysis
CPRA	Coastal Protection and Restoration Authority
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
GO FISH	Gulf Organized Fisheries in Solidarity and Hope Coalition
LMOGA	Louisiana Mid-Continent Oil and Gas Association
NOAA	National Oceanic and Atmospheric Administration
RESTORE AC	et Resources and Ecosystems Sustainability, Tourist Opportunities and Revived Economies of the Gulf Coast States Act
TLCD	Terrebonne Levee and Conservation District
USACE	United States Army Corps of Engineers

CHAPTER 1

ENTRÉE INTO COASTAL LOUISIANA'S WATER- AND LANDSCAPE

"It was like paradise." We stood at the end of the road. He was wearing his Native Veterans hat and that look on his face where you know he is about to tell a joke, a jest of seriousness that immediately turns into a beaming smile and little fits of laughter. Chief Albert took a deep breath. The laughter stopped. "My grandpa started it and it looks like I'm going to finish it." He pointed towards the south where he grew up, where he spent his childhood days before he became Chief, drying muskrat skins and shrimp, digging for haunted treasure, moving the cows across the way. After flooding from Hurricane Carmen in the 1970s, Chief Albert, the Traditional Chief of Isle de Jean Charles, relocated to Pointe-aux-Chenes, approximately ten miles north of Isle de Jean Charles. He looked into the distance, describing the land that once went back behind his family's house for miles, where they romped in the woods and trapped. The house was gone, taken by a storm. And the land, a little bit of it remained, and quickly turned into eroding marsh. The rest vanished under the salty waves.

At first this place seemed motionless. It was still, silent, and yet, if I sat and listened, I could almost hear the change. If wisdom does indeed sit in places (Basso 1996), I had to rest my eyes upon this place, upon the dead trees dotting the landscape as ghostly reminders of what the land once looked like, sit with its people underneath a raised house enjoying the afternoon breeze, and just listen.

Driving south down the bayous of coastal Louisiana for the first time, I saw a sweeping landscape of grey, bare skeletal remains of dead trees with limbs pointing out to what was once land but was now water. I passed scattered houses and trailers, some empty, some occupied, some elevated as high as nineteen feet in the air, some on the ground in danger of flooding. The

first time I drove down the Island Road, a narrow strip of asphalt filled with holes and cracks that connects Isle de Jean Charles to lower Pointe-au-Chien, I could see the summer heat radiating off the road. There was not another person in sight. I stopped in the middle of the four-mile stretch and sat in the car, staring in the rearview mirror at the dilapidated road behind me, the stretch of road ahead, and the vast water surrounding me mere feet from either side of the car. I saw what outsiders who had been down the bayou described to me as feeling like "the end of the world." With a hint of wind, the salty water crept towards the tires. At the time, I could not imagine the



Figure 1. Island Road. Source: Julie Koppel Maldonado, 2012.

lives of the people here and the spider web of family, tribal, Acadian, and colonial relationships intertwined with the water and the vanishing land. As I was allowed deeper into the residents' lives and homes, the web became more detailed and intricate and more and more people and stories came to life along these bayous.

Background

Environmental and technological disasters, extractive industries, river mismanagement, and climate change are drastically transforming coastal Louisiana's water- and landscape. Today, the tribes' cultures and water-based settlements and livelihoods are threatened by rapid environmental change due to co-occurring adverse events – oil and gas extraction, changing waterways and other development projects, oil disasters, increased exposure to hurricanes, sediment subsidence, and sea level rise. With the disappearing land and greater impacts from storms, many people have been forced to relocate. Oil and gas companies dredging canals to lay thousands of miles of pipelines along Louisiana's coast have caused intense coastal erosion and saltwater intrusion (Austin 2006; Burley 2010; Couvillion et al. 2011; Penland et al. 2000; Turner 1997). The construction of dikes and levees and damming of the Mississippi River by the U.S. Army Corps of Engineers (USACE) and local levee districts, other flood control measures, cypress logging, and large-scale agricultural development prevent sediment and silt from reaching the Delta, resulting in severe environmental degradation (Barry 1997; Button and Peterson 2009; Freudenberg et al. 2009; Laska et al. 2005). Yet, the local, state, and federal agencies, including the USACE, the Louisiana Coastal Protection and Restoration Authority (CPRA), and the local parishes and levee districts, have mostly left the communities out of government-led restoration efforts, such as the Morganza-to-the-Gulf of Mexico Hurricane Protection System.

The three communities have experienced varying numbers of people relocating over time. Some periods have seen greater numbers of people relocating, such as following Hurricane Andrew in 1992, Hurricanes Katrina and Rita in 2005, and Hurricanes Gustav and Ike in 2008. The change in population has been most extreme on Isle de Jean Charles. For example, as Chief Albert explained, there were seventy-eight houses and approximately 325 people on the Island in 2002 before Hurricane Lili, there were fifty-four houses after Hurricane Rita in 2005, and there were about twenty-five houses and seventy people left in 2012.

Using ethnographic research methods and theories of structural violence and ecosyndemics, this dissertation investigates the displacement and socio-cultural, health, and livelihood effects experienced by the Isle de Jean Charles and Grand Caillou/Dulac Bands of Biloxi-Chitimacha-Choctaw Indians and Pointe-au-Chien Indian Tribe due to human-induced environmental changes. It is important to recognize that it is not only coastal Louisiana's tribal

communities that are being impacted by severe environmental changes. There are also Cajun, African-American, Creole, Caribbean, and Asian-American communities that are being impacted in coastal Louisiana, for whom this research can also be relevant.

The three tribes are small state, but not federally, recognized communities located in coastal Louisiana. The tribes are historically fishers, trappers, farmers, and hunters and include descendants of Biloxi, Chitimacha, Choctaw, Acolapissa, and Atakapa Indians.¹ Located approximately eighty miles southwest of New Orleans, the Isle de Jean Charles and Grand Caillou/Dulac Tribes are in Terrebonne Parish and Pointe-au-Chien is in both Terrebonne and Lafourche Parishes. Parish governments, similar to a county, exercise a variety of different functions, such as maintaining many water works, roads, health units, and hospitals, promoting economic development, regulating business activities, and overseeing many state and federal programs in the parish (Police Jury Association of Louisiana 2014). Coastal parishes in Louisiana also have levee districts that engage in flood control projects at the parish level, such as the Terrebonne Levee and Conservation District (TLCD).

Each of the three communities share a common cultural geography, with tribal members attending the same schools, churches, grocery stores, and use the same fishing waters and hunting grounds. The tribes also share many common environmental resource concerns, such as subsidence, saltwater intrusion, erosion, sea level rise, loss of land, trees and traditional plants, and loss of sacred places.

The Tribal Communities Today

The Biloxi-Chitimacha Confederation of Muskogees (BCCM) is an alliance of the Grand Caillou/Dulac Band, Isle de Jean Charles Band, and Bayou Lafourche Band of Indians. The

¹ Atakapa is also spelled Attakapa.

BCCM formed in 1995 when the three tribes came together to work towards obtaining federal and state recognition. The governing body of the Confederation is the Grand Council, which is comprised of one representative from each of the three tribal bands or communities (Biloxi-Chitimacha-Choctaw of Louisiana 2013). The Pointe-au-Chien Indian Tribe adopted the tribe's name in 1995 when the tribe started its federal recognition process. While the three BCCM tribes and Pointe-au-Chien have ancestral connections, each tribe traces its heritage back to a specific set of Indian, Acadian, and French ancestors who established each particular settlement.

Terrebonne and Lafourche Parishes, where the three tribal communities are located, are the heart of "Cajun country," and are among south Louisiana's seafood, agriculture, and oil hubs. Approximately one-fifth of seafood harvested in the U.S. comes from Louisiana (Gramling and Hagelman 2005); much of the catch comes from waters off Terrebonne and Lafource Parishes. Shrimp is the primary commercial fishery and other important commercial species include, but are not limited to, blue crabs and oysters.

In 2013, Terrebonne Parish had an estimated population of 112,749 people, with 5.6 percent American Indian, and Lafourche Parish had an estimated population of 97,141 people, with 2.9 percent American Indian (U.S. Census Bureau 2014a, 2014b). The only census data available for the individual communities was for the town of Dulac, which decreased from an estimated population of 2,458 people in 2000 to 1,463 people in 2010, with 39.4 percent American Indian and a median household income of \$19,738 (U.S. Census Bureau 2000, 2010b). Other populations in Terrebonne and Lafourche Parishes include the United Houma Nation, Cajuns, African-Americans, Asian-Americans, Hispanics, and Anglo-Americans. People tended to live clustered together by ethnicity and kinship groups. The decrease in population size was in

large part attributed to Hurricanes Katrina and Rita in 2005, Hurricanes Gustav and Ike in 2008, and increased flood insurance rates, as will be discussed further in chapter seven.

Many of the people I spoke with who had relocated did so because of a combination of environmental and economic factors, but for the most part, increasing impacts from hurricanes and loss of fishing-based livelihoods played a major role in their decisions to leave. The communities flooded from six major storms and hurricanes between 2005-2012. Many people relocated after a hurricane, either because of severe flood damage to their houses, lack of resources to elevate their houses, inability to afford the increasing flood insurance rates, or were tired of rebuilding. Some left to pursue other job opportunities because of the loss of fishingbased livelihoods due to a combination of severe environmental changes and a changing seafood industry flooded by lower-priced, subsidized imports. Others left because, while they might have found employment nearby, they had difficulty getting to work with the roads being flooded so often. Some people left to seek better educational and employment opportunities or because they married someone outside the community.

Grand Caillou/Dulac

A proportion of the approximately 1,200 members of the Grand Caillou/Dulac Tribe



Figure 2. A Few Shrimping Boats Remain in Grand Caillou/Dulac. Source: Julie Koppel Maldonado, 2012.

reside in Terrebonne Parish along Shrimper's Row (the road running along the western side of Bayou Grand Caillou just north of Dulac) and in areas of Dulac, Grand Caillou, Dularge, Chauvin, Bourg, and some of Houma, living near a larger Indigenous population who identify themselves with the United Houma Nation, as well as Cajuns, Anglo-Americans, and African- Americans. Marlene, who had relocated to Bourg, about twenty miles north of Dulac, told me that until Hurricane Andrew hit in 1992, the Grand Caillou/Dulac area had grocery stores, shrimp factories, a drug store, fruit stand, meat market, bank, and clothing store. She said, "It was all family shrimpers, everyone had a little boat and shrimped." But, "Now there's nothing." Now people living in Grand Caillou and Dulac had to drive thirty minutes to get to a grocery store. There was a Catholic church in Dulac and an elementary and middle school in Grand Caillou. There was also a vast array of fishing camps owned by outsiders who used the area for recreational fishing on the weekends and holidays.

Isle de Jean Charles

Isle de Jean Charles is located in Terrebonne Parish, between Bayou Terrebonne and Bayou Pointe-au-Chien, with Bayou Jean Charles running down the middle of the Island. The Isle de Jean Charles settlement, established in the 1840s, is made up almost entirely of Isle



Figure 3. Some of the Remaining Houses on Isle de Jean Charles. Source: Julie Koppel Maldonado, 2012.

de Jean Charles tribal members, with a few residents identifying with the United Houma Nation Tribe and a few fishing camps located on the southern end of the Island owned by outsiders or "weekend warriors" who use the waters as a recreational escape. The Island used to have a couple grocery stores, with one also serving as the church, school, and dance hall. Now there was only a small fire station on the Island and a privately owned marina at the south end. The Isle de Jean Charles Tribe has 696 tribal members, but with so many people having relocated, there were only about twenty-five houses and seventy people left in 2012.

Pointe-au-Chien

Fiervent Rome- au - Chien Indian Italie couluu utry

Figure 4. Sign Entering lower Pointe-au-Chien. Source: Julie Koppel Maldonado, 2012.

The Pointe-au-Chien Indian Tribe is located in Lafourche Parish alongside Bayou Pointe-au-Chien with Oak Pointe Road running between the bayou and the houses. Many tribal members also reside on the other side of Bayou Pointe-au-Chien in Terrebonne Parish, as well as farther north

along the bayou in Pointe-aux-Chenes.² Tribal members are descendants of

families "that have lived continuously on the Bayou Pointe au Chien since at least 1850" (BIA 2008b). Approximately one-third of Pointe-au-Chien's 688 members live close together in Pointe-au-Chien, about one-third lives nearby in communities such as Montegut, which is about fifteen miles northwest of Pointe-au-Chien, and another one-third resides out of the immediate area (BIA 2008b).

² In referring to the Indian tribe and farther down (south) the bayou, I spell the name as Pointe-au-Chien, meaning Point of the Dog, which has traditionally been viewed by locals in the area as where the Indians lived, and is how the Indian tribe spells its name and location. Farther up (north) the bayou, where a number of residents from both Isle de Jean Charles and Pointe-au-Chien had relocated, is spelled Pointe-aux-Chenes, which means Point of the Oaks.

Pointe-au-Chien once had four dried shrimp factories in the area, but these were now all gone. There was still one small shrimp business in the community where shrimpers could sell their catch. On

the Terrebonne Parish side, Pointeau-Chien has a Baptist church;



Figure 5. Bayou Pointe-au-Chien. Source: Julie Koppel Maldonado, 2011.

there was also another church a couple miles north and a Catholic church about ten miles north in Pointe-aux-Chenes, across the street from the elementary school. Residents from both Pointeau-Chien and Isle de Jean Charles attended these churches and school. There was a grocery store in upper Pointe-aux-Chenes, which people from the Island and Pointe-au-Chien used. The grocery store served as a place where residents talked about how each other's families were doing or about the seafood catch that week. Besides food, the store also sold t-shirts for tourists, showing signs of the rural gentrification down the bayous (Solet 2006). There were also fishing camps owned by "weekend warriors," a trailer camping park, and a privately owned marina on the southern end of Pointe-au-Chien on the Terrebonne Parish side.

Community Dynamics

Residents of the three communities lived together by core family unit, with houses surrounded along the bayou by extended family members. Most people either lived in small houses they built themselves or in trailers based on affordability and what had been lost or rebuilt after flooding from storms. Each distinct tribe had a Tribal Council decided upon by the tribe and a designated leader that governed tribal affairs and was advised by a Council of Elders. Isle de Jean Charles was the only tribal community in the area that had a designated traditional chief since the settlement began. The position of chief had always been held by a male and was passed down from generation to generation, traditionally to family members, with the chief selecting the person he



Figure 6. Map of the Three Tribal Communities, Including Some Surrounding Communities. Source: Carrie Beth Lasley and Reddy Avula, University of New Orleans Center for Hazards Assessment, Response and Technology, 2013.

believed to be the most qualified and able to lead the community. Pointe-au-Chien had a Chairman since the tribe started their federal recognition process in the mid-1990s. Tribal members asked Chuckie to be the Chairman in 1999, with his main role to work for federal recognition. Each

chief of Grand Caillou/Dulac selected the next chief; for example, Chief Shirell's father appointed her uncle as chief, and her uncle in turn appointed her as chief.

The three tribes are characterized by their food practices, oral history, mutual aid, and trading resources, such as trading shrimp for crab or oysters or helping each other with boat maintenance or housing construction. Information quickly spread throughout each community. For example, I would often come across a resident who would note in passing what I did and who I was with the previous day, even though I might not have seen that person for a couple weeks. Often when I was speaking with someone, they would comment on a passing car and whether or not they knew the person or if it was a familiar vehicle. Residents kept an eye on who came in and out of the communities.

Tribal members brought together their traditional beliefs with their Catholic or Baptist beliefs and practices acquired through forced assimilation. Their layered belief system was most noticeable through their house décor. For example, Antoine, a fisher and elder from Pointe-au-Chien, had a sign hanging from his elevated porch that said "Crazy Horse," an Oglala Lakota leader in the 1840s who fought against the U.S. government encroaching upon Lakota land and way of life. The decorations on the living room walls included pictures of several historical Indian chiefs and warriors, including Crazy Horse, religious crosses, and a cast net that was handmade by Alphonse, another Pointe-au-Chien elder who had relocated many years ago to Golden Meadow along Bayou Lafourche, about forty-five miles to the east.

Another example of their layered belief system was the naming ceremony and Native American Mass held every year at the Catholic Church in Pointe-aux-Chenes. When I attended the ceremony in November 2011, about twenty of us gathered outside the church before the Catholic service began. The participants started a small fire under the darkening sky. Tribal members from Pointe-au-Chien and Isle de Jean Charles gathered in a circle around the fire. Outside the circle a couple of male tribal members softly beat the drum, as Chief Albert entered the middle of the circle. About eight people were brought in to make an inner circle. Young adults and elders came together as smoke from the burning sage wafted around them and Chief Albert whispered in each person's ear their Indian name, symbolizing their commitment to their tribe and Native heritage. Standing in the outer circle, out of the corner of my eye I saw the church congregation entering the building. The naming ceremony participants faced each of the

four geographical directions, in turn. The slight wind caught the fringes hanging from people's clothes. As the naming ceremony concluded, we entered the church building.

The Native American participants being honored in the Mass entered together, two at a time walking down the aisle, the reds, turquoises, and browns of their clothes bounced slowly in rhythm to the five male tribal members beating on one communal drum at the front of the building. The white Bishop clapped at the drummers to stop and asked the congregation to honor those who were the "first settlers." I thought back to the irony of these words a few months later during the celebration for an elderly priest from the Island. The priest giving the homily speech talked about how his father had been game warden for the Louisiana Department of Wildlife and Fisheries in the area and he had known of the Island since the 1930s when his father "discovered" the Island. Yet, people had been living on the Island for generations. This echoed the way European colonialists wrote about discovering lands that had been occupied by Native peoples for millennia.

The communities remained isolated until missionaries started visiting the southern end of the bayous in the early 1900s (Pelletier 1972). Residents were racially segregated in schools and churches until the 1960s, as well as being socially isolated. In the 1970s and 1980s, Cajuns, whites, and land developers started building fishing camps in the area



Figure 7. Fishing Camps, Isle de Jean Charles. Source: Julie Koppel Maldonado, 2012.

(Solet 2006). For residents who grew up before the 1970s, some interacted with extended family members living in other tribal communities, but they rarely interacted with anyone else. This

isolation reinforced and helped shape the deep ties the residents developed to place. But as the landscape changed, so too did the communities; more and more outside actors (e.g., oil corporations, land developers, government officials) came in, more residents had left, and down the bayou was no longer isolated.

Environmental Changes

Today, there is no more marsh land, no more buffer zone because of land erosion. Our land and trees are dying, becoming more saturated with saltwater brought by hurricanes. Just with wind now there is high water that has to be pumped out. The water doesn't go down fast like it used to. It gets trapped behind the levees. You can't grow anything because of the water. The plants are losing roots and dying. There is nothing to hold the land together. They have oil and gas under this earth and they're pumping it all out. The Earth is purging itself. – Marlene, Grand Caillou/Dulac Band of Biloxi-Chitimacha-Choctaw Indians, excerpt from digital story, 2012.

One hot August afternoon I biked across the Island Road, watching a storm coming in from the north. I biked slowly down the Island and heard birds chirping nearby and the faint sound of a radio. I passed a shed surrounded by a décor of dozens of cans tied up together in nets with the cardboard cases strewn about on the ground. A subtle breeze momentarily cooled me as I looked beyond the shed and saw the cross marking the cemetery. In between the scattered houses were the remains of a few standing posts, a trailer that was bulldozed a few months prior but not yet removed, and a number on the road indicating an address without a house.

I arrived at a house belonging to Chris, a life-long resident of the Island. He was sitting underneath the elevated house with a glove on one hand holding an oyster, as his other hand cut through the oyster with a knife. A sack of oysters sat in front of him on the table. He opened one up and gave it to me on the half-shell. I looked at the oyster that covered the length of my hand and slurped it down. The saltwater exploded in my mouth. Biking back across the Island Road, lightning streaked through the darkening sky and sheets of rain came down at a distance. I was suddenly very aware of being surrounded by water. Two men got out of a truck to cast their fishing rods. I watched a few herons spread their wings and take flight over the marsh grass, which quickly melted into water. Later that night, I walked alongside Bayou Pointe-au-Chien. Land nets placed in the water to catch shrimp cast out a line of lights. The reflection of light shimmered across the dead trees. A skiff with a man and young boy slowly passed in the bayou. I saw the ripples in the water alongside me where a fish had just jumped out, heard the frogs croaking in the marsh grass just over the levee, and tasted the salty air. What at first seemed so still suddenly became full of life, of sounds, smells, and tastes. I saw how embedded the people's lives and livelihoods were in this water- and landscape.



Coastal Louisiana contains approximately fortyone percent of the nation's coastal wetlands (Turner 1997), but is experiencing ninety percent of the total coastal wetland loss in the continental U.S., with 1,880 square miles of land lost in the last eighty years (Couvillion et al. 2011; CPRA 2012). This amounts to a

Figure 8. Map Showing Land Loss in Southeast Louisiana. Source: U.S. Geological Survey, 2004.

decrease of about twenty-five percent of land area in coastal Louisiana since 1932, with twentyfive to thirty-five square miles of land disappearing every year (Couvillion et al. 2011; NOAA 2013). The three primary land loss processes include erosion (removal of land by water action), submergence (increase of water level relative to ground surface elevation), and direct removal (removal of land by actions other than water) (Penland et al. 2000). The three tribes have experienced tremendous land loss in and around their communities. For example, Isle de Jean Charles was about five miles wide and twelve miles long in the 1950s; today it is approximately one-quarter mile wide and two miles long.





Figure 9. Isle de Jean Charles in 1963 (left) and 2008 (right). Source: U.S. Geological Survey.

While the river management system put in place in the twentieth century by the USACE and local levee districts provided both flood control and economic benefits, such forms of management, control, and re-direction of the Mississippi River deprived the coastal system of much needed sediment and fresh water, as will be discussed further in chapter two (Austin 2006; Barry 1997; Button and Peterson 2009; CPRA 2012; Freudenberg et al. 2009; Laska et al. 2005; Streever 2001; Turner 1997). Instead of collecting along the coast, the sediment brought by the Mississippi River went into the Gulf of Mexico and dropped to the bottom of the sea floor (Morris 2012). This process greatly accelerated the rate of naturally occurring subsidence, where the organic sediments deposited along the coast go through a process of compacting, consolidation, and oxidation (Turner 1997). While coastal Louisiana's wetlands underwent a continuous state of change, most of the current environmental changes and land loss were due to human-induced causes.

Furthermore, the current Director of the Terrebonne Levee and Conservation District (TLCD) explained that building structures such as the Houma Navigation Canal in Terrebonne Parish, were both a blessing and a curse. While jobs could be created, there was a possibility of further flooding the region, creating a thirty-five mile funnel channel from Houma to the Gulf of Mexico. These processes, along with cypress logging in the latter part of the nineteenth century, and oil and gas extraction and development since the mid-1900s, have resulted in severe loss of wetlands and barrier islands to the south, decreasing the natural protection against hurricanes and storms.

Dredging canals for oil and gas pipelines and navigation has caused drastic erosion and land loss. Additionally, as will be discussed further in chapter three, climate change-induced sea level rise and intensified hurricanes have greatly increased the impacts of changing waterways and subsidence (Burkett and Davidson 2012; Williams et al. 1992). With increased impacts from hurricanes and extreme storms, rates of coastal land loss have accelerated in recent years (Couvillion et al. 2011). From 2005-2012, the communities endured flooding from six major storms and hurricanes, including Hurricanes Katrina and Rita in 2005, Hurricanes Gustav and Ike in 2008, Tropical Storm Lee in 2011, and Hurricane Isaac in 2012. Whereas before, they rarely experienced flooding from hurricanes, now with the land loss and disappearance of barrier islands to the south, flooding could occur just during high tide. What were once small ponds were now lakes and some lakes had become large bodies of water merged into the Gulf of Mexico. Some place names had entirely disappeared and the map of coastal Louisiana had to continuously be redrawn. As saltwater intrudes into the sediment-rich, freshwater areas, the

increased salinity destroys the forested wetlands and freshwater marshes (Coastal Louisiana Ecosystem Assessment and Restoration/CLEAR 2006). Freshwater was now brackish and brackish water was now saltwater.

The vast expansion of nutrias throughout coastal Louisiana also greatly affected the wetlands. Nutrias, which are large rodents, were brought to the United States from South America in the late 1800s for fur ranching. The market for nutria fur was strong through the 1960s and 1970s. However, by the end of the 1980s, the foreign and domestic fur markets declined and there were reports of nutrias causing substantial damage to marsh and agricultural lands. In 1999, a Louisiana coast-wide nutria damage assessment estimated that nutrias damaged 105,000 acres of marsh (Holm Jr. et al. 2011:6-8). However, while nutrias' grazing can cause severe wetland loss, it is in conjunction with other stressors, such as saltwater inundation, subsidence, and sea level rise, that the damage is most significant (Holm Jr. et al. 2011:50).

Furthermore, the largest hypoxic "dead zone" in U.S. coastal waters was in the northern Gulf of Mexico due to increased nutrient concentrations in the Mississippi River (CLEAR 2006; Rabalais et al. 1999). This "dead zone" was largely caused by the impacts of large-scale agricultural development. The large-scale agricultural process produced runoff highly contaminated with nitrogen and synthetic chemicals from herbicides and pesticides, as well as runoff containing paper, plastic, and motor oil (Morris 2012:5; also CPRA 2012). For an ecosystem that sustained a variety of fish species and shellfish and supported the largest commercial fishery in the lower forty-eight states (CLEAR 2006), such processes could have severe effects on living resources (Rabalais et al. 1999).

With erosion and intense saltwater intrusion, the majority of the communities' trees were dead and their traditional and medicinal plants, gardens, and trapping grounds, along with the

animals, were gone. For example, in Pointe-au-Chien, there was only one substantial garden left in the community, maintained by an elder and her sons. However, this garden was also at risk, flooded with two feet of water after Tropical Storm Lee hit in 2011 (Coastal Louisiana Tribal Communities 2012). The physical landscape changes raised concerns over what it meant for the tribes' culture, livelihoods, and sense of place if their lands disappeared under water.

Administrators and public entities often framed land loss in coastal Louisiana as due to riverine sediment reductions, changing waterways, and manipulation of the Mississippi River. For example, the "Living with Hurricanes" exhibit at the Pretere Louisiana State Museum in New Orleans, which listed the multinational oil corporation Chevron among its sponsors, explained that the primary issue of land loss in the region was river management focused on the levee system and trying to control river flooding and the waterways. The oil industry was only mentioned towards the end of the exhibit in a video on a wall. Listing the development in the region over the past couple hundred years, one of the clips mentioned the oil industry creating channels that cut through the wetlands. There was one other mention about man-made channels in another video, but it did not make the direct link to the oil and gas industry. For a visitor to the region, the lesson was that levees and controlling waterways resulted in loss of wetlands. I encountered this time and again when people came to visit the communities and talked about the managed waterways and levee construction, such as when staffers from Senator Mary Landrieu's office toured Isle de Jean Charles and asked if the land loss was all from levees being built, focusing solely on the river system.

When government officials and outside authorities spoke about restoration, they usually focused on the changing waterways. The State of Louisiana historically maintained that land loss was due to sediment deprivation, where re-direction of the Mississippi River had led to sediment

being pushed out to the Gulf of Mexico instead of collecting along the coast, and that restoration needed to be based on sediment management (Turner 1997). However, the vast amount of land loss since the 1930s appeared to be due to the impacts of changes in wetland hydrology from oil and gas corporations dredging channels and forming spoil banks (Turner 1997), which are excess surface materials left alongside a canal after dredging. Human processes have caused nearly seventy percent of land loss, with oil and gas related processes being the greatest cause of land loss (Penland et al. 2000).

Local residents expressed frustration over the misunderstanding of the causes of land loss. For example, Donald, co-Chairman of Pointe-au-Chien, voiced frustration when he told me about taking a scientist out in his boat and the scientist told him that oil-related activities were the cause of forty percent of the land loss, which follows Penland's study that demonstrated the oil and gas industry had caused thirty-six percent of the total land loss (Penland et al. 2000). Yet, from Donald's perspective, the land loss was almost entirely caused by the oil industry. I thought back to when Donald had a couple of scientists on his boat to look into how the tribe could restore its sacred mounds. I watched the scientists struggle to set up their instruments to measure the depth of the water. Donald kept saying the water was five feet deep. After several attempts, the scientists finally measured the water depth. It was five feet. Donald knew these waters, experienced the land loss, and readily saw the causes of change.

Struggling with how to tell a different version of a story than what was typically publicized, my husband Phil, a water resources engineer, said he had always been told and understood the land loss issues in coastal Louisiana as predominantly caused by the developed waterways, which is often cited as the most important factor affecting coastal Louisiana's wetlands (U.S. Department of the Interior 1994). But after seeing the landscape covered with oil

refineries and the bodies of water filled with oil rigs and channels for pipelines, he realized that how we get the energy resources the way we do, "this is what people should know...It's the people living with pipelines in their backyard."

Oil and Water

When I started my research, I assumed that people's perspectives about the causes of local environmental changes would be more balanced between the oil industry and manipulation of waterways, e.g., building of dams, levees, and other flood protection measures. However, to conduct a useful and significant ethnography, I had to be ready to see what I did not expect (Bourgois and Scheper-Hughes 2004). Almost everyone I spoke with in the communities believed that the primary cause of local environmental changes (e.g., land loss, erosion, and saltwater intrusion) was the oil industry dredging canals for pipelines, as well as sucking oil and gas out of the ground, causing the land to sink. As Josette, an Isle de Jean Charles tribal member who had relocated twenty miles north to Grand Bois because of flooding on the Island, said, "Oil companies got down there and started building canals everywhere, that's when the land started going away."

Besides dredging channels, local residents taught me about the land sinking in part because of all the oil and gas resources being taken from the earth. As Chris, from Isle de Jean Charles, explained, "you take gas and oil out, what's on top of it is going down. Start sucking it out, the top will go down first, that's what's happening to this Island." People from Pointe-au-Chien and Grand Caillou/Dulac also echoed this sentiment. In fact, subsidence rates near oil and gas production fields have been found to be higher than geological rates of subsidence (Morton et al. 2006).

With coastal land loss being the result of complex natural and human interactions and activities on the landscape, "it is difficult to isolate an activity as the singular cause of a specific area of coastal land loss" (Penland et al. 2000). For example, when I asked Gabrielle, who relocated from Isle de Jean Charles to Houma in the 1970s when she was a child after her family's trailer flooded during a hurricane, about the biggest cause of land loss, she talked about the converging issues,

A lot of it has been with gas and oil exploration, the cuts, the cutting of canals and things, the saltwater. The saltwater is what killed everything...the water flowing a certain way is what built the land...Because land gets rebuilt a certain way and when it's been built like that for thousands of years and all of a sudden you decided to come in and cut it and change the flow of that, you're going to have losses and the losses now are outweighing the gains.

After spending time talking local residents, many people would eventually bring up ideas about the construction of dams and levees and diverted waterways. A number of residents also talked about other issues causing environmental problems, such as invasive species (e.g., nutria), natural subsidence processes, and government regulations (e.g., hunters and trappers were no longer allowed to burn the marsh, which they used to do sometimes to rejuvenate it). But when asked about environmental changes they had noticed, first and foremost people talked about how dredging canals for oil and gas pipelines and navigation for oil and gas extraction purposes caused the land loss and saltwater intrusion.

Research Objectives

What does it mean for people when the landscape they depend on for their lives and livelihoods as fishers, farmers, hunters, and trappers rapidly changes and disappears and they become socially, culturally, economically, and even physically displaced? This dissertation analyzes how structural violence, stemming from the colonial era to current government policies fueled by an oil-based economy, have led to displacement in the three tribal communities. It
examines how structural violence operates in people's lives and analyzes how political, social, and economic structures have shaped the public and state response to the severe environmental changes and flood protection and restoration needs. These responses reflect structures of inequality and power dynamics between government authorities, multinational oil and gas corporations, and local residents that have turned coastal Louisiana into an energy sacrifice zone.

The objectives of the research were to learn: (1) how people from the three tribes were adapting to environmental change, including making decisions to resist physical displacement or relocate; (2) how people experienced environmental change and displacement; and (3) how environmental degradation intersected with economic, social, and political power structures. The goals were to understand people's experiences of co-occurring disasters and environmental change, what individuals and communities were doing when faced with potential displacement, and what lessons could be learned that would be relevant for communities undergoing similar experiences of rapid environmental change and displacement.

Framing the Research: Through the Lens of Structural Violence and Ecosyndemics

Structural violence is suffering structured by historically- and economically-driven processes that constrain people's agency (Farmer 2003:40). A single identifiable actor does not cause structural violence, but rather it is a social structure or system that causes harm to people. I use the term structural violence instead of social injustice to make tangible the "social machinery of oppression" (Farmer 2004:307), and because using the word "violence" provides a more accurate portrayal of the scope of the problem and the harm people from the three tribal communities were experiencing (Galtung 1969; Vorobej 2008). Ecosyndemics focuses on the synergistic interaction of co-occurring epidemics and a changing climatic, physical, and social environment (Baer and Singer 2009). These two concepts form this dissertation's foundation for understanding the environmental changes and related impacts the communities have experienced.

This study focuses on how global power structures and processes of domination are carried out and reproduced on a local scale. Specifically, these processes are played out in people's lives through political structures and an oil-based economy that have turned coastal Louisiana into an energy sacrifice zone, which is "a place where human lives are valued less than the natural resources that can be extracted from the region" (Buckley and Allen 2011:171). Historical processes and the current global political economy, as well as local culture and political narratives and ideology, have shaped people's daily experiences of environmental change and masked the structural violence being experienced (Bourgois and Scheper-Hughes 2004). Political, economic, and social structures of inequality have led to the displacement of people from the three communities and determined which communities are and are not included in state-led coastal restoration and flood protection activities.

Forced displacement, "the process through which population groups are compelled against their will to leave their habitat or/and productive activities and to seek alternative locations and modes of securing their living" (Cernea 2008:12), does not take place in a vacuum, but is embroiled within long-term issues of inequality and human rights (Piguet et al. 2011:25). Seen as "targets of least resistance" (Oliver-Smith 2009), the majority of people affected by human-induced environmental change are often the most vulnerable groups in a society and become further marginalized through the process of displacement (du Plessis 2010).

The environmental change and displacement occurring down the bayous can be understood through the concept of ecosyndemics, which is the "synergistic interactions among diseases produced by a changing climatic, physical, and social environment... that have the

potential for significantly increasing the total disease burden, including morbidity and mortality, suffered by human populations worldwide" (Baer and Singer 2009:75). The synergistic interactions are encouraged by social conditions and unjust structural relationships (Baer and Singer 2009). Similarly, for people from the three tribal communities affected by human-induced environmental changes, the co-occurring disasters of oil spills, hurricanes, and rising sea levels produced by a changing climatic, physical, and social environment increased people's vulnerability to displacement.

Broadening the concept of ecosyndemics, multiple elements (e.g., extractive industries development, changing waterways, hurricanes) synergistically interacting within a specific system of power relations have led to the health, livelihood, and socio-cultural effects experienced by both people who had stayed and those who had relocated. What the tribes are experiencing today is a continuation of past policies: from colonial policies that forced the tribes' ancestors to relocate, to land grabbing by oil and gas corporations and land developers, to current government restoration and flood protection plans that discount the tribal lands and resources. With the history and continuation of environmental and technological disasters, such events could be re-labeled as a "legacy of atrocities" (Taylor et al. 2014).

The experiences of coastal Louisiana's tribal communities relate to what other communities are going through around the world. For example, as discussed in more detail in subsequent chapters, oil-development has resulted in the forced displacement of Ogonis in Nigeria, the Maldives government used the 2004 Indian Ocean tsunami as an excuse to relocate villagers away from coastal locations to make way for tourism development (Klein 2007), and coastal communities in Alaska and the Pacific Islands are at risk of displacement due to sea level

rise and other climate-related impacts. Such cases highlight the legacy of atrocities that are played out across the globe, further marginalizing individuals and entire communities.

A Political Ecology Perspective on Environmental Change and Displacement

An ethnography of structural violence and ecosyndemics fundamentally draws upon political ecology, which includes "the power relations, inequalities, connections, and contradictions that join natural and social processes over time" (Williams 2001:409; also Berkes 2008:254). Considering the interface between human society and the physical environment, political ecology frameworks have unpacked the ways dominant Western views of nature-culture relations and capitalist economic perspectives have created social inequality (Escobar 1996; Oliver-Smith 2009; Peet and Watts 1996; Stonich and DeWalt 2006). For example, so-called "natural" disasters highlight local pre-existing socio-economic inequalities and reproduce those inequalities as the disaster unfolds (Button and Oliver-Smith 2008; Oliver-Smith 1999; Reed 2008). As opposed to focusing on the physical properties, disasters actually represent "complex combinations of natural hazard agents and human action" (Maskrey and Peacock 1997) and, as such, there is no such thing as a "natural disaster." In line with understanding disasters as a "legacy of atrocities," Oliver-Smith (1999) developed the concept of the five-hundred-year disaster during his research on the 1970 Peruvian earthquake. This research encouraged a shift from viewing vulnerability to disasters as stemming from abnormal events or geophysical situation of a place to explanation through the everyday social order and systems of domination and inequality (Hewitt 1983; Hilhorst and Bankoff 2004; Oliver-Smith 2004; Quarantelli 1998; Wisner 2004).

Understanding social vulnerability, defined as "a combination of factors that determine the degree to which someone's life and livelihood is put at risk by a discrete and identifiable

event in nature or in society" (Blaikie et al. 1994:9; also Oliver-Smith 2004:24), as a long-term process means understanding the social, political, and economic conditions that create barriers for people to adapt to environmental changes (Hilhorst and Bankoff 2004;Wisner 2004). This dissertation considers how the political, social, and economic systems have socially constructed the layers of vulnerability to disasters and environmental change experienced by coastal Louisiana's tribal residents. The environmental changes highlight the contradictions in these systems and the need to make decisions under increasingly uncertain and complex conditions (Austin 2004; also Watts 1983).

While the three tribes have been made vulnerable to environmental degradation, their use of traditional knowledge of the waterways and landscape has helped them to identify the environmental changes occurring and culturally appropriate means of adaptation and mitigation. Traditional ecological knowledge refers to "tribal strategies for adaptation that are based on tribal systems of responsibilities and the worldviews/cosmologies such systems flow from" (Whyte 2013:527). Tribal members' generational knowledge of the water- and landscape can identify adaptation strategies to maintain cultural sovereignty. However, as the environment rapidly changes and degrades, their traditional knowledge is threatened as well.

The Concept of Tribal Community

I use the term community in this dissertation as a way to define a relationship between people shaped by a shared interest, belief, or position (McNeil 2011:161). This does not mean that the people within these defined communities are homogenous; the individuals have different opinions and points of view, as well as their own individual experiences, memories, and knowledge. I focused on people who are members of one of the three tribes, also referred to as tribal communities. There are residents within each of the settlements, particularly in the

Grand/Caillou Dulac area, that are part of another tribe, the United Houma Nation, and residents who are non-tribal members and from other descent, most of whom I did not significantly engage with or include as research participants. Due to internal tribal relations and establishing research boundaries, I only spoke with a few residents who belonged to the United Houma Nation, but for the most part did not involve myself with the tribe, even though they also had members who lived in the settlements where I was working. Therefore, I do not claim this research to represent a study of any entire geographic area.

Furthermore, the research does not cover the breadth of any of the tribes; there are tribal members that live within the geographic community locations and those that have relocated elsewhere that I did not engage with during my research. I also use the term "tribal community" because the people I spoke with talked about their tribe and their community intermixed, with the phrase providing a sense of the cohesion among tribal members and differentiating one tribe from another. For example, while some people from Isle de Jean Charles might be related to some people from Pointe-au-Chien, they are from distinct tribal communities.

Research Methods

Advocacy goals of reaching public audiences, power-holders, and decision-makers shaped my research practice and choice of methodologies (Sanjek 2004). I have already published some of this material, trying to engage audiences about what is going on in coastal Louisiana. An advocacy anthropology that is shaped to reach public audiences, decision-makers, and non-anthropologists works to decolonize the research process and is built on the notion that research is about knowledge that is most useful for people to problem-solve and translate into action (Freire 1970; Park 1997; Smith 2004).

My interactions with community members included audio-recorded intentional conversations, which were mostly conducted in people's houses, as well as story circles and digital stories. My analysis was also based on my participant observation with the three tribes and taking part in everyday community activities, gatherings, and social interactions, such as spending the day talking with people on their elevated porches or going out shrimping, which gave me a sense of people's experiences and perceptions, particularly for those who had stayed. Through my placement and active participation, I aimed to gain insight into research participants' experiences through their culturally specific context and ways of knowing (Pink 2009).

I thought about the specific topics and questions I wanted to address and wove these in throughout conversations (Peterson 2011). Between the three tribal communities, fifty-six people participated in intentional conversations and/or story circles, and five people created complete digital stories, with an additional person writing her story but not turning it into a complete digital story (see Appendix A for details on research participants). I also interacted with many other people in the communities through spending time with families, participating in daily activities, and living nearby in Houma and Pointe-au-Chien.

The bulk of my analysis was based on interactions with twenty-two community members who had stayed and twenty-five people who had relocated, as well as two non-Indian long-term residents, five government and non-governmental organization representatives, and two Indigenous women from outside Louisiana who were working with the tribes. I had conversations with eleven people from Grand Caillou/Dulac, including one person who was a member of the United Houma Nation; seventeen people from Isle de Jean Charles; and nineteen

people from Pointe-au-Chien, including two people who were members of the United Houma Nation.

I selected people to talk with using the snowball sampling technique (Bernard 2006). I started with the tribal leaders, as was culturally appropriate, to explain my research, as well as the Tribal Councils when asked by the leaders, and asked their permission to conduct my work with their tribes. I created a statement of purpose that included my research objectives, methodology, and a set of guiding principles I would follow while conducting the work (Bethel et al. 2011; Peterson 2011). I provided this statement, along with an informed consent form, to the tribal leaders and people who participated in intentional conversations, digital stories, and story circles.

I asked the tribal leaders to guide me to other people in their tribe. Most often people would rattle off names to me of others I should speak with without my ever asking. With most people somehow related or connected, it often felt like getting passed around a big family. One acknowledged shortcoming of this research is that by starting with the tribal leaders and snowballing to the people they introduced me to, I might not have encountered as great an array of differences in opinion as existed in the communities. As people paid attention to who was doing what within specific spaces, they were often well aware of who I was already interacting with, which could have closed me off from certain segments of the population. For example, there was some tension around several people who were adamant about staying in place and feeling that tribal leaders were forcing them to relocate, so some of them chose not to share their stories with me. Some people also had research fatigue from talking with journalists, other researchers, and at public forums. Furthermore, with many younger people having already relocated, and my engagement more with people who had stayed, my analysis is based more on

interactions with middle-aged adults and elders, as well as several older youth. While I spent a good amount of time interacting with the children who lived in the communities, my conversations with people under the age of eighteen are not included.

In my analysis, I tried to illustrate the most commonly shared perspective of the people with whom I spoke, while acknowledging this might not be each individual's perspective or understanding. For example, while many people talked about needing to be good stewards of the land, there was also a sense that even their own people abused the land. During a Pointe-au-Chien story circle, some of the women discussed how locals needed to be educated and taught to change their habits, such as not dumping oil out of their boats into the water.

One issue the tribes had was that it was often the same people who attended meetings, spoke out at public forums, participated in organized activities, were active members of the Tribal Council, and were called upon for tribal participation. Faced with the immediacy of restoration needs, tensions could arise over what strategies to undertake and how they should be carried out, as well as frustration over the same people advocating for the tribes without more widespread participation.

Furthermore, while I believe many people working within government agencies or for the oil industry are well intended, this dissertation analyzes the relationship between the tribes and the political and economic structures. It is not each individual working in these institutions that are implicated for acting unjustly, but rather the systems as entire entities that are enacting structural violence. In chapter four, I further discuss the grey line between the oil industry and local communities.

Needing to limit the scope of the research, the people I interacted with who had relocated were those who relocated either within Terrebonne or Lafourche Parishes, nearby parishes, or

Mississippi. Many community members relocated to other places throughout the Gulf Coast and the U.S., but were not included in this study. While my initial intent was to focus more on people who had already relocated, I actually spent more time with people who had stayed, becoming interested in the displacement impacts they were experiencing while still physically in place and the everyday strategies they employed to stay. I spent more time with people from Isle de Jean Charles and Pointe-au-Chien than Grand Caillou/Dulac because I did not meet people from Grand Caillou/Dulac until after I already started my fieldwork, whereas I had initial interactions with people from Isle de Jean Charles and Pointe-au-Chien on my previous visits to the area.

I originally intended to use pseudonyms for all people who participated in the research. However, after conducting my research, I realized that disguising the names of the tribal chiefs and chairmen would not only be unrealistic, but also disrespectful. Additionally, as the digital stories have been shown publically, with the permission of the storytellers, it would also be difficult to hide the storytellers' identities. The same holds true for people I spoke with who hold public positions. For other participants, I have created pseudonyms, following traditional anthropological protocol. Therefore, I have established a mixed-pseudonym system, with special consent given by people whose real names are used (McNeil 2011:16).

Participant Observation

The main research method I employed was participant observation in and around the three communities. I paid attention to the small nuances of daily life, such as people always waving to others as they passed. This small gesture seemed to be about staking a claim that you are familiar in the place. I adopted some local ways of speaking, such as talking about location of places as either up or down the bayou, instead of north or south. I also participated in local ways of food sharing, such as bringing shrimp to an elderly resident or coming home to a pile of boiled

crabs at my doorstep. By engaging in such activities, I was able to more fully place myself within the landscape and social world.

While participating in people's daily activities, I felt the sense of what it is to exist somewhere that is both degraded and beautiful. How can you explain what it feels like to stand in a place and be with the people of a place that was called in 1931 by Roy Nash, special commissioner of the Bureau of Indian Affairs, "the strangest colony on the American continent" (Truehill 1978)? When I brought people to the Island I got responses across the spectrum from "why does it look like a war zone? Like a bomb just went off?" to "this is the most beautiful place I have ever seen." Even for people who had worked and lived in places around the world marred by oppression and poverty, they were still left in wonderment about what was happening to the landscape and people in communities within the U.S. When I spent time with families, I had the space and time to see the spectrum. To help me get a better physical sense of the communities, the leaders took me around, telling me stories, and describing the changing landscape and community.

Some activities I observed more than participated in, such as a naming ceremony and Native American Mass, and some I attended as a friend, such as the Pointe-au-Chien boat blessing, where priests come to the community and bless the boats for the beginning of the shrimp season. But for many events, I was an active participant. Attending Tribal Council meetings helped me understand the topics the tribal leaders and those who attended found most significant, such as obtaining federal recognition and the British Petroleum (BP) Deepwater Horizon Oil Disaster settlement claims.



Figure 10. Shrimping Near Pointeau-Chien. Source: Julie Koppel Maldonado, 2012.

I also went shrimping with some of the men during shrimp season, although a lot of people were not going out as much since the 2010 BP Deepwater Horizon Oil Disaster. Out on the boats shrimping late at night or hanging out with people at the land net at the end of Pointe-au-Chien, I watched how informal trading played out with customers and friends. I saw firsthand the shrimpers' small catches. I learned about mythical stories the residents grew up with, the land loss and other environmental changes they had experienced, the communities' social dynamics, their local knowledge of the waterways, and why they continued to stay.

For example, out on a shrimp boat with Donald, from Pointe-au-Chien, I saw the art form that existed on this working coast as I watched him seamlessly control the netting down to catch the shrimp, back to steering the boat through the night, back out to untie rope, then make more knots to secure the rope. He climbed out on the edge of the boat in his white rubber boots – locally known as Cajun reeboks – grey t-shirt, blue jeans, tanned hardened arms. He stood out on the boat's ledge, hanging on to nothing while he wiggled around some of the netting and pushed out the pole. Eventually the nets were up and at the back of the boat two loads of shrimp mixed in with sardines and some crabs hung in the air above the deck. His deckhand pulled the net towards himself and untied the rope at the bottom of the net. The load of shrimp spilled out onto the boat deck for sorting. Experiences like this helped me to witness the micro-dynamics around the bayou at night and better understand the residents' connection to place and how their livelihoods and sense of place helped shape their culture and identities.

Another component of my participation was as tour guide to outside activists, journalists, and other researchers. This helped enforce for me the importance of understanding local dynamics and ways of interacting, being a presence but not over intruding, and awareness of not just acting as another means of extraction (Smith 2004). After a few months, I was invited to take part in more tribal political affairs. This too proved challenging, as I felt like I could be supportive but did not want to push ideas I had separate from what the leaders were advocating. As I was invited to more activities, I gained more insight and understanding and experienced things that I might not have otherwise noticed. Hearing the tribal leaders explain to others issues they had often told me about provided new perspectives on the social and political landscape.

Once I felt I was not over-stepping boundaries, I found a small dwelling called a camp to live in towards the southern end of the bayou in Pointe-au-Chien on the Terrebonne Parish side. Living in the community allowed me to see the dynamics of everyday life and better understand the connection between the landscape and the lives of its residents. I got to spend time with families, accompanying people on their daily tasks and working alongside them, see the ways families interacted together and shared resources, and witness people who had relocated coming in and out of the communities. I observed some residents tending what was left of their personal gardens and some people at their docks at night peeling and sorting shrimp, learning about how the shrimp and crab seasons were going and the topics residents talked about together.

I saw people starting their day, boats starting to motor down the bayou, outsiders coming in with big trucks pulling boats down to the marina at the end of Pointe-au-Chien on the Terrebonne side, or someone cross a road with a bucket full of shrimp or oysters. I would stop and chat with people along the way. In these passing conversations I learned about how people from upper Pointe-aux-Chenes talked about people from lower Pointe-au-Chien and the Island

and their own memories of Indians trading fur at the local store and what it used to be like shrimping. I learned people's daily routines of heading up the bayou, walking the children outside to await the school bus, tending to their boats, mowing the lawn, sitting out on their porch. I saw people sitting out shucking oysters, getting ready to leave for church, getting home from a night of shrimping. Living down the bayou as Hurricane Isaac approached at the beginning of September 2012, I saw how people tracked the storm, made decisions to leave or stay and where they would go, how they worked together to get boats moved, crab traps collected, supplies divvied out, and how their way of being, of celebrating, feasting, and persistence, continued.

Intentional Conversations

As time progressed, I adjusted my methodology based on what worked best with local residents. Instead of a structured interview guide, I had intentional conversations, mostly one-on-one with people in their houses, which I digitally recorded to transcribe afterwards and I also took notes after the conversation either in my car or at my residence. Most people I got to know over several visits before I sat down with them more formally for an intentional conversation. I established beforehand that I would come over to have a more detailed conversation with them, specifically related to my research. I initiated conversations by asking people to tell me about their favorite stories of growing up in the community or family stories passed down to them.

During the intentional conversation, which often lasted for two or more hours, I wove in specific topics and questions I wanted to address. Intentional conversations allowed space for participants to share information and perspectives in a more holistic manner than a formal interview. The goal was also to allow more space for cultural sensitivity, allowing for adapting the conversation as appropriate. These conversations, mostly held at people's houses, were based

on the way people were already used to interacting and engaging, talking over many hours and not confined to a set of questions and schedule. One of the most important aspects of having intentional conversations was spending time talking about other topics that showed me what was most important to the participants, pointing to ideas and issues I would not have thought to ask about; these seemingly tangential topics often ended up being the heart of someone's story. However, one drawback of this approach was that a lot of my research data was less focused on specific topics.

Story Circles

Another methodology I utilized was story circles, using the mode of communication that tribal members were used to, being together and sharing stories. Story circles were held with each community separately, with four to six people participating in each one. I facilitated two story circles in Isle de Jean Charles, two in Pointe-au-Chien, and one in Grand Caillou/Dulac. For each story circle, we spent several hours gathered together around a table in a participant's house, sharing food and conversation. I posed some broad questions to start the conversation, but the participants usually took the conversation in their own direction. I digitally recorded the conversation and took notes following the story circle. It was not just the shared knowledge that came out of these story circles that was important, but watching the community dynamics play out. As they talked they fed off each other, each one remembering part of a story. These circles helped me learn not just *what* but *how* they remember, such as events and memories were not marked by time, but rather by hurricanes.

I learned about the important gathering places, such as the store that used to be on the Island that served as the bar room, grocery store, dance hall, church, and school, and how the participants experienced their changing landscape and talked about the causes of the changes. I

learned about place names, such as that Bayou Lafourche was previously called the Chitimacha River, and about places where the land had washed away. The participants talked about what

their lives were like growing up, about spiritual and religious beliefs, and segregated schools.

I more readily understood the communities' interactions with local government officials and agencies and the politics of levee placements, planning, and implementation, along with the causes and



Figure 11. Story Circle, Isle de Jean Charles. Source: Julie Koppel Maldonado, 2012.

consequences of being left out of government-led restoration and flood protection plans. The participants talked about the collapse of the shrimping industry and how trapping was all gone and with it a way of life. I learned about the first oil and gas corporations that came to the area, the first environmental changes the residents started noticing after canals were dug, and why many people had to leave a fishing-based livelihood to work for the oil corporations.

I heard stories about *boucheries* (a party that involves killing, cooking, and sharing a pig), dances, personal and community gardens, and gatherings at people's houses, which have diminished with so many people relocating. Participants who had stayed in place explained the importance of staying where they are and, for those that had relocated, why they did so. Tribal members talked about their perceptions about the future of their land and community.

Digital Storytelling

I also created digital stories with six tribal members. Digital stories are short narratives created in video format that bring together participants' words, voices, and photographs. The

idea was for the stories to be shared with their friends and family and to be useful to the communities; for example, a tribal leader used her story to apply for a grant. With permission from the storytellers, the stories have also been shown at a Native American film festival and gatherings and professional conferences to bring attention to the issues coastal Louisiana's tribes are facing.

In this dissertation, the quotes used at the beginning of chapters and introducing sections within chapters often come from these digital stories. A major challenge with this method was that it imposed an unfamiliar way of storytelling on the participants. I tried to resolve this by only selecting a few people who I thought could readily adapt to the process without feeling over-imposed upon. I adapted the digital storytelling techniques to fit what worked for them. While digital storytelling can be a healing process, it can also be taxing to dredge up certain memories and enhance the stress caused by solastalgia, which is "the 'lived experience' of intense change, manifest in a feeling of dislocation and of being undermined by forces that destroy the potential for solace derived from the present" (Connor et al. 2004). While there was a risk of enhancing stress, by telling their story people were also able to relive moments they had not thought of in years and remember events that had taken place that brought joy and helped shape their identity.

The six stories were created in different ways. Stories were written by the storyteller or told to me over several conversations. We then went through an iterative process of editing that maintained their own words. Not all of the stories were completed visually; one remaining in just the written form helped show me how the significance of these stories is really in the process itself. The process of creating the stories revealed new ways of seeing and experiencing the participants' world. I tried to incorporate the storytelling into activities the participants were

comfortable with and enjoyed. For example, I sat and took notes as Marlene, a Grand Caillou/Dulac tribal leader, spent hours telling me her story while cooking jambalaya. I also saw what places were most important to the storyteller. For example, Chief Shirell, the Chief of Grand Caillou/Dulac, chose to go back to the place where she grew up and the cemetery where her dad and other family members were buried. I learned how she felt a sense of belonging in a place, even after having physically relocated from there years before.

I also got to see what memories stood out most for the storytellers, sometimes in surprising ways. For example, when Chris, a resident of the Island, was telling me his story he talked about how he and his dad napped together after oystering. A big smile spread across his face and he banged his fist on the table. "Wow! I can't believe I just thought of that. It's been thirty years since I thought about that. Wow! That was a moment!"

Theresa, who grew up in Houma, had one parent from Pointe-au-Chien and one from Isle de Jean Charles, and had moved to Pointe-au-Chien after marrying Donald, a life-long resident of Pointe-au-Chien, shared with me stacks of albums and photos to look at for her story. I saw pictures of weddings and family gatherings, boat blessings, flooding, and post-storm debris. I saw how much the lives of residents were tied together across the bayou, such as a picture of Chris from Isle de Jean Charles sitting on the dock across from Theresa's house, playing guitar. Looking at the pictures, we laughed and chatted and she told me stories behind each image. I went through a similar picture process with each storyteller, either going through their pictures together or driving around the bayous to capture the images they wanted to include. The various senses people shared through the digital storytelling process and story circles – visual images, sights, smells, tastes – provided deeper insight into their relationships with the landscape and their community, showing the interconnectedness between their subjectivities, environment, and experiences.

I asked the participants about why they chose to talk about what they did. I learned about understanding their concepts of "home," their feelings about staying versus relocating, important memories evoked by sights, sounds, and smells. I learned about different ways they perceived and understood the local environmental and social changes and what the changes have meant for their communities, families, and personal lives, experiencing a deeper way of knowing and understanding than would be possible through conversation alone.

I digitally scanned many of the participants' pictures they shared with me not only to use for their digital stories, but also as a way of helping to preserve a part of their family and tribal history because many residents had lost their pictures, family records, and artifacts during hurricane-induced flooding. By recording pictures for the digital stories, such documenting serves as a type of community archive, providing a tool to preserve the past and by which adaptation strategies can be devised based on lessons and knowledge from the past (Laska et al. 2010). In the sentiment of Freire (1970), storytelling shapes our experiences and how we learn in an engaged process. The stories created provided a living testimony of the storytellers' lives, cultures, and challenges faced.

Cross-Community Conversations

Along with my local mentor (discussed in the "placing myself as researcher" section below), I facilitated conversations with other communities to bring people together over online communication across cultural and geographic boundaries to share and learn from each other's experiences. The conversations provided people with the opportunity to learn from each other about how decisions are made, environmental changes faced, staying in place versus relocating,

the processes they had gone through, and obstacles faced. The conversations built upon and expanded work already underway to bring communities together over common resource concerns.

For example, I facilitated a cross-community conversation through Skype during a fellowship gathering with the three tribes, another local tribe, representatives from tribes in Minnesota and Alaska, and researchers focused on resource extraction and environmental injustice. The conversation was held during a fellowship gathering to be respectful of people's time and bring together multiple events within the same forum. The cross-community conversation took place between those gathered and a leader from the Ogoni community, who was displaced by Shell Oil in the Niger Delta, and with whom I had previously worked with in South Africa and Benin where many Ogonis were seeking asylum. The communities sat together in a recreation building of a local church, looking at the projected image on the wall from my computer. The Ogoni leader told his community's story and talked about the similarity of his people's experiences with the people from coastal Louisiana. The messages he emphasized included coming together and the intellectual strength of organization. In turn, the leaders from the coastal Louisiana tribes introduced their communities and the challenges and destruction they faced from the oil corporations and the erosion and loss of sense of community and land.

I also facilitated another conversation through Skype that was more directed, in which a tribal leader and researcher from Alaska shared information, guidance, and wisdom about community-led relocation efforts. During this conversation, I heard the coastal Louisiana tribal leaders speak about trying to stay or needing to relocate, the land loss they were experiencing, and being discounted by the government in restoration and flood protection plans. While these types of conversations were useful, they cannot replace the significance of face-to-face

connections, as many people in the communities do not have computers or Internet access and lack good phone reception. Moreover, the emotional connection is not as significant when done through a computer screen or over the phone as it is when looking at someone in person.

The participatory-based methodological approach allowed for a greater understanding of the social, political, economic, and ecological processes that have formed, shaped, and re-shaped the landscape the tribes have called home for centuries. The stories that I heard represent people's memories and interpretations of their lived experience and relationship to an historical context (Romero 2013). These methods helped me better understand the long history of displacement and environmental degradation that the three tribes had experienced and drew out people's reflections about the environmental changes in ways that might not have otherwise been revealed.

Placing Myself as Researcher

I initially visited Louisiana's bayou region in September 2009. I returned briefly in June and July 2010, then spent nine months conducting fieldwork between October 2011 and September 2012. I returned again in December 2012 and have continued to visit and spend time with the communities every few months.

My work over several years prior to this research led to my focus on the intersection of infrastructure development and climate change causing environmental change and displacement. I had worked with a group of Ogoni people from Nigeria displaced by oil extraction and development, with the World Bank and as a research assistant on issues of development-caused forced displacement and resettlement, and was involved with the U.S. National Climate Assessment. Building off these experiences, I became intrigued by coastal Louisiana, which presented a location under tremendous threat from both sea level rise and oil and gas-related

development and where many coastal residents had already been forced to relocate. I connected with a community organizer and researcher with the Center for Hazards, Assessment, Response, and Technology at the University of New Orleans, and through her mentorship, I was introduced to leaders from Isle de Jean Charles and Pointe-au-Chien during my initial visits in September 2009 and June and July 2010. I met the leaders from the Grand Caillou/Dulac Tribe after starting my research in 2011. I followed proper procedures of entrée in introducing myself through several social visits and by being introduced by someone the tribal leaders already trusted (Bethel et al. 2011).

One of the biggest challenges of anthropological work is figuring out how to place oneself. There is an ebb and flow in moving between anthropologist, advocate, friend, and outsider. People let you into their personal lives and it is up to you to prove worthy of their trust and friendship, knowing where to draw the line between research and private matters. While conducting research, I tried to acknowledge and understand local and broader politics and consider where the views and perspectives of the person I was speaking with were coming from and possible reasons for them using specific terms and meanings (Berner and Phillips 2005). In trying to account for the tribes' history and social traumas to better understand their current social context, I tried to remain aware of who is silenced in the research process, acknowledging my own role in the power relationship (Chávez et al. 2003; Freire 1970; Kothari 2001; Smith 2004).

I thought about how to place myself not just emotionally but also physically. I wanted to be geographically close to the communities but also give them time and space to feel comfortable with me and decide how much they wanted to let me in. I first placed myself physically in Houma, which is like the palm of the hand, and the bayous are fingers stretching

out from it. Houma is an industrial hub about twenty miles north of the three communities with roads connecting to each community. During my last couple months of research, I lived in a camp on the Terrebonne Parish side of Pointe-au-Chien. My husband Phil accompanied me on my research, which provided personal support and helped me relate more to the people with whom I was working, as they are very family-oriented. However, there was a noticeable difference between myself and the other women as I did not have children at the time, which was often a challenge to explain.

I watched and participated in interactions with other researchers, journalists, activists, filmmakers, and government representatives. I saw those who reached out with the best of intentions and fell in love with the people and the place. I saw others who took advantage of people in a vulnerable situation. I was asked several times by such visitors if I was an advocate. I would correct them by saying I am an anthropologist. But now I wonder if we really have to make that choice. However, tension can arise in trying to be both at the same time, as it becomes much more challenging to be objective. I also have a responsibility to my participants in balancing being a friend, advocate, and researcher.

One of the key components of understanding and listening during my research was in actively being aware of the assumptions we take into any given situation. I had to be ready to see what I did not expect (Bourgois and Scheper-Hughes 2004:318). To conduct responsible ethnographic work, it is essential that we learn from our assumptions and that when we engage with participants, we genuinely listen.

In paying attention to my own placement, subjectivity, and research methods I undertook, I hope to share the experiences that shaped my understanding, theoretical insight, and conscientization (Freire 1970) about people's place attachment and the effects of displacement.

Focusing on people's stories and experiences of environmental change, I am producing a subjective account of reality, acknowledging my own role and views in understanding their experiences.

Hurricane Isaac hit during my last few days down the bayou. While handing out supplies outside the Knights of Columbus Hall in Pointe-aux-Chenes, I finally started understanding my place as both friend and anthropologist. As I stood in the middle of the road alongside Bayou Pointe-au-Chien directing traffic and giving hugs to all my friends passing by, I realized that I was no longer in this abstract "field." I understood the landscape and its people a little more and how they co-exist together.

As I became involved in tribal politics and befriended many residents, I understood my responsibility as a researcher more clearly and ethical choices that I needed to make. Not wanting to be another extractive industry, I worked to ensure that what I produce does not negatively affect activities the communities are pursuing. While there are tensions that existed in the communities and other components and events that I do not specifically address, I include the findings that are most relevant for this study. Through work with the communities, leaders hopefully became further aware that researchers should not just extract knowledge *from* them, but rather work *with* them and support efforts that they are already undertaking.

Outline of the Chapters

Following this introduction, chapter two provides a description of the tribes' history and migration to their current locations. It also provides a detailed description of the history and background of the environmental, social, and economic changes. Chapter three continues this history from the second half of the twentieth century to the present, focusing in particular on the oil industry, environmental disasters, climate change, and federal tribal recognition.

Chapter four highlights the impacts of oil extraction and oil-related development and disasters in coastal Louisiana. It includes a discussion about the structural violence of the federal and state governments backing the interests of oil corporations working in the area, such as British Petroleum (BP), Shell Oil, and Louisiana Land and Exploration. The chapter also discusses how the government and oil corporations exploited the local people and turned coastal Louisiana into an energy sacrifice zone (Colten 2012), which has been enforced through neoliberal-based policies of accumulation by dispossession (Harvey 2003). Finally, the chapter includes a focus on the 2010 BP Deepwater Horizon Oil Disaster as an example of the structural violence played out in the region by the government-multinational oil corporate partnerships.

In chapter five, I build upon a view of displacement that includes people who experience displacement even when not physically displaced (Cernea 2006). The chapter broadens an ecosyndemics perspective to illustrate people's experiences of livelihood, health, and sociocultural effects due to the co-occurrence of human-induced environmental changes, disasters, globalization, and forced assimilation.

Chapter six focuses on place attachment and placelessness, looking specifically at the relationship between environmental change, place, cultural identity, practice, and memory, and why many residents had decided to stay in place. As local residents understood the threat of disasters and on-going environmental change, they expressed feelings of dislocation and solastalgia, which is "the distress that is produced by environmental change impacting on people while they are directly connected to their home environment" (Albrecht et al. 2007). Focusing on livelihoods, local, traditional knowledge, and social memories, the chapter analyzes people's attachment to place and sense of displacement as that place is degraded.

Chapter seven addresses how state-led restoration and flood protection plans reproduced structures of inequality. Chapter seven also discusses the adaptation and resistance to environmental change that tribal leaders and individual residents had pursued, why some individuals decided to relocate, and the relocation processes undertaken by the leaders of Isle de Jean Charles. While their agency was constrained through structural violence and they could not always resist oppression (Farmer 2004), residents exercised their agency through adaptation strategies. The tribes approached adaptation as a process, not an outcome, one in which adaptation was connected to social agency, power relations, and issues of environmental justice (Peet and Watts 1996).

Chapter eight summarizes the dissertation's central findings and includes a set of recommendations to be considered by government agencies, communities facing environmental change and displacement, and researchers.

CHAPTER 2

"NOTHING IS SLOWING DOWN THE TIDE": A LONG HISTORY OF DISPLACEMENT

AND ENVIRONMENTAL CHANGE

When I was young, I would see armadillos, raccoons, snakes, spiders, marsh hen, otters, and some nutrias. At the close of day, I would see bats flying out of the trees. I would think about the stories my elders told me of how the Island was once self-sufficient, filled with cattle and gardens. Before my time things had already started to change.

We now have three large canals around us bringing water with the southeast and southwest wind. They were built for the oil and gas industry, first for boat traffic, and then for pipelines. There are about five pipelines that cross this Island at the upper and lower ends. The pipelines have been abandoned but the canals are still open. These man-made canals play a part in the land eroding around my house. But the oil and gas industry is not the total blame for erosion.

The change started when dams and channels were put in during the '20s and '30s. Also, the nutrias brought here from South America ate the marsh grass and the marsh started to break up when the tide hit it. My grandma used to skin nutrias and muskrats for fur, but that's no more. There is no more land left for trapping. Now, you have to leave the Island to do most anything. The saltwater is coming in and nothing is slowing down the tide.

- Chris, Isle de Jean Charles Band of Biloxi-Chitimacha-Choctaw Indians, excerpt from digital story, 2012.

Home to over two million people (CPRA 2012) and containing the seventh largest delta in the world (Couvillion et al. 2011), coastal Louisiana is an intricate network of diverse habitats and landforms, such as natural levees, ridges, barrier islands, forested wetlands and fresh, brackish, and saltwater marshes connected together in an ecosystem of deltaic plains formed over thousands of years from deposits of sediment from the Mississippi River (CLEAR 2006; Turner 1997; Viosca Jr. 1928; Williams et al. 1992). Located between the Mississippi River on the east and the Atchafalaya River on the west, Louisiana's coastal wetlands are separated by natural deposits of sediment, soil, and clay (Austin 2006). Louisiana lies at the end of the Mississippi River drainage basin, the fourth largest drainage basin in the world. The Mississippi River deposits between several hundred thousand and several million tons of sediment into the Gulf of Mexico every day (Barry 1997:39). As Kerry St. Pé, the Executive Director of the Barataria-Terrebonne National Estuary Program (BTNEP) explained, We have all these bayous that come down like fingers. To go from this bayou to another, you don't just drive across. The high land is on the old historic ridges of the Mississippi River, the natural levees. When the river overflowed its banks and deposited its silt load, as soon as it flooded and left the channel, left the energy from that flowing water, it dropped the sediments. So the higher land is right next to the channel.

He went on to describe what makes coastal Louisiana ecologically and culturally distinct,

Different ecologically than most of the world because we live at the end of one of the world's great rivers. And the morphology that's due to the annual flooding of the Mississippi River and when we seek high lands to build our homes and communities we go to the water...We depend on the webbing that's the wetlands to protect these communities, that's what's protected us for generations, hundreds of years. Not just the barrier islands but the marshes and the other ridges that we didn't settle on that are a minor tributary of the river. And over the years they've had to build levees behind these communities built on the ridges because they've lost their webbing.

Humans live in an environment shaped by natural processes and human actions, subject to continuous change and alteration (Watts 1983:40). As described in Chris's story and Kerry St. Pé's words above, the environment that communities have inhabited for generations in coastal Louisiana has been transformed by layered processes of land loss, controlling waterways, and resource extraction. This chapter focuses on how these modern processes are part of a history in which people have continuously shaped the landscape and been shaped by it. It lays the historical foundation of structural violence to explain the context for the environmental changes and displacement the three tribal communities are experiencing today. The chapter is divided into historical time periods to provide a broader context within which the three tribes are situated.

Pre-Colonization

Approximately 1.3 to four million Indigenous peoples lived in the southeast region and shaped the landscape of the present-day United States before European colonialists arrived (Gremillion 2004:67; Saunt 2004:128). The southeast region included significant linguistic, social, and cultural diversity among the Indigenous population (Jackson and Fogelson 2004:1). The tribes of the southeast could be classified into five groups based on language: the Natchez,

the Muskhogean, the Tunican, the Chitimachan, and the Atakapan (Swanton 1911:8-9). The Siouan and Catawban groups were also in the region, but did not share the region's modal cultural patterns (Jackson and Fogelson 2004:7). The Choctaw and Chickasaw groups in the western part of the region shared patterns that were different than the eastern groups such as the Cherokee, Creek, and Yuchi, which shared common features (Jackson and Fogelson 2004:5).

Groups typically lived in small villages comprised of households and families situated around a center area where political and ceremonial activities took place (Jackson and Fogelson 2004:9). While the matrilineal system was dominant in the region, there was still diversity within this system and a gendered division of labor. Women were responsible for farming and raising the children, while men were associated with hunting, war, and diplomacy. Indigenous peoples of the Mississippi Delta relocated seasonally, as necessitated by annual flooding. People adapted, gaining knowledge over generations of how to live in their wetland environment and where to go when the water level rose (Morris 2012:43). The groups favored collective knowledge passed down over generations over knowledge derived from individual experience. For example, the medicine people relied on knowledge passed down to them rather than acquiring the knowledge separately (Jackson and Fogelson 2004:9).

During the Early and Middle Holocene periods from 9500 to 3750 B.C., Indigenous groups lived across the southeast region, making use of a wide range of resources. The bandlevel groups were united into larger mating and information exchange networks located along river basins and possibly raw material sources. These larger bands were temporary and independent from one another (Anderson and Sassaman 2004:91). The Indigenous peoples were hunters and practiced seasonal migration, as well as construction of massive earthen mounds around the lower Mississippi Valley (Anderson and Sassaman 2004:91, 95). Interconnected

environmental stress and population pressure gave rise to complex societies during the Middle Holocene. Groups living along riverine or coastal areas could have put stress on the resource-rich areas. During this time, the Indigenous population increased while migratory movements decreased, forcing people ever closer together. At the same time, El Niño increased in occurrence and intensity, which could have led to extremely variable climatic conditions, possibly including greater flooding. These events could have led to more collective efforts between people, with some of the changes in organizational complexity due to long-term variations in sea level (Anderson and Sassaman 2004:96).

Adaptations to a changing environment occurred through cultural knowledge developed over millennia of settlement in the region. The groups were more sedentary than previous periods, but still practiced seasonal migration for food and social reasons (Anderson and Sassaman 2004:97). While the Indigenous peoples in the southeast lived in egalitarian societies, there was cultural inequality among population groups living in close proximity. The existence of complex shell and earthen mound centers suggest that band-sized groups were joined together into social structure by collective ceremonial activities (Anderson and Sassaman 2004:96).

During the Late Holocene period from 3750 to 650 B.C., the modern climatic conditions developed, with higher global temperature and lower rates of sea level rise, leading to the creation of productive estuarine environments and floodplain habitat (Sassaman and Anderson 2004:101). These conditions led to the permanent settlement of coastal locations, more intensive use of coastal and riverine areas, and the Indigenous populations expanded their hunting and gathering economies (Sassaman and Anderson 2004:101). However, seasonal movement still occurred when spring flooding prevented permanent floodplain settlement (Sassaman and Anderson 2004:113). From 700 B.C. to A.D. 1000, the Indigenous peoples continued to live as

hunter-gatherers in small, scattered egalitarian groups and increasingly in permanent settlements. By A.D. 1000, some groups lived in dense, hierarchically organized settlement systems managed by a small group of elite (Jefferies 2004:115). Farming, which was the basic form of subsistence from about 900 A.D. until the mid-twentieth century, was mostly associated with women, who controlled the fields and produce generated.

The Isle de Jean Charles Band and Grand/Caillou Dulac Band of Biloxi-Chitimacha-Choctaw Indians and the Pointe-au-Chien Indian Tribe descend from ancestors who were part of these Indigenous groups in the Mississippi River Valley. Tribal leaders told me that the tribes are descendants of Biloxi, Chitimacha, Choctaw, Acolapissa, and Atakapa Indians who lived in the region for millennia before European contact. When asked about their Indigenous heritage, tribal members most often referred to their Choctaw roots and sometimes Chitimacha, as well as Biloxi. Therefore, these particular tribes will be included in the following sections.

Before the French and Spanish colonialists settled along the lower Mississippi River Valley in the sixteenth and seventeenth centuries, the Chitimacha tribe was comprised of fifteen village communities with a total of 3,000 people, occupying most of the Delta region (Hoover 1975). It is estimated that 15,000-20,000 Choctaw occupied what is now central Mississippi and into Alabama (BIA 2008a). The Biloxi, a small group, were located on Biloxi Bay, Mississippi near the Gulf of Mexico (Dorsey 1893). Biloxi called themselves Taněks a"ya, meaning "First People" (Dorsey 1893).

From the sixteenth to early eighteenth centuries, the population increases in areas of land scarcity and shift to large-scale maize agriculture during the previous few centuries led to groups organizing highly centralized chiefdoms with institutionalized leadership patterns and a core settlement of villages arranged in political and economic hierarchical order (Thornton 2004:48).

At the same time, pressures on culture and land were starting with the arrival of Spanish and French colonialists.

Colonial Encounters

The Spanish explorer Hernando de Soto and his crew were the first colonialists to journey through the southeast region in 1539, altering the region as they progressed by destroying crops and enslaving Indigenous peoples (Saunt 2004:129). Encountering a seemingly endless array of wetlands, including marshes, which are wetlands inundated with water, and swamps, which are forested wetlands (EPA 2013), de Soto's men described the Mississippi Valley as a "hell upon a hostile earth" (Kane 1944:5). The arrival of the colonialists created a much more widespread and faster rate of environmental change throughout the southeast. Colonialists transformed vast tracts of land into cultivated fields and introduced invasive weeds, which, along with the colonialists' migration, spread and accelerated the destruction of forest ecosystems (Gremillion 2004:67). The colonialists gave names to unfamiliar features of the landscapes and waterscapes, inserting control over history and the environment (Morris 2012:39-40). However, some non-French place names, such as Natchez along the Mississippi River, maintained competing claims to places.

After the British established the first permanent settlement in the colony of Carolina in 1670, Indian slaves became a significant part of colonial trade, with both colonialists and Indigenous peoples capturing slaves (Saunt 2004:134). In 1682, the French colonialist La Salle traveled down the Mississippi River, claiming the surrounding land for France and naming the territory in honor of King Louis XIV of France (Spear 1999:36). In the 1680s, La Salle established a fur trade in the Mississippi Valley and established a colony along the Gulf Coast, from which to attack Spain's silver mines in northern Mexico (Saunt 2004:135). The

establishment of this colony ignited a series of colonial activity, with Spain working to destroy La Salle's French settlement (Saunt 2004:134).

By 1685, the Indigenous population in the southeast decreased to approximately 200,000 people, due to diseases such as smallpox introduced by European settlers (Saunt 2004:128). The introduction of new diseases, enslavement, migration of Indigenous peoples from the east as British and French colonialists moved westward, replacement of traditional hunting and gathering grounds with agricultural development, and colonial military actions and rivalries, which Indian groups used to play one European group against another, all contributed to changing tribal structures (Cummins 2014:16; Williams 1979b:14). With so many Indigenous peoples dying abruptly, the social structure of communities and families collapsed and, with the loss of so many elders, knowledge of history, traditions, and medicine was lost (Saunt 2004:128).

In 1699, French colonial brothers Iberville and Bienville established the first permanent colony on the Gulf Coast on Biloxi Bay, in the present-day state of Mississippi (Saunt 2004:135; Spear 1999:36). By that time, the neighboring Indians, including Biloxi, Pascagoula, Mobilians, and others had already been devastated by disease and slave trade (Saunt 2004:136). The Biloxi were first mentioned in French accounts at this time, reported to be located on Biloxi Bay and the Pascagoula River (Brain et al. 2004; Dorsey 1893; Martin 2004). Elders and tribal leaders from Isle de Jean Charles told me how, faced with the French encroachment on the Biloxi's lands, the Biloxi set fire to the colonialists' ships and migrated to the present-day state of Louisiana. In the early 1700s, some Biloxi were reported settling on a small bayou near New Orleans (Brain et al. 2004). Other Biloxi moved along the Mississippi River above Baton Rouge and joined with the Tunica tribe (Cummins 2014:21).

Baton Rouge was established in 1699 and New Orleans was founded in 1718 by the French colonialist Bienville. During this time, the major port of New Orleans made colonial Louisiana an important trade center, pulling the region and its inhabitants into a global market (Cummins 2014:10). By 1720, under the auspices of the Company of the Indies, a French corporation, French settlements emerged along the Gulf Coast and Mississippi River. Encouraging slave importation from West Africa and the Caribbean's French Islands to entice economic development, between 1719 and 1731 the Company imported nearly 6,000 Africans as slaves to work the larger concessions, otherwise known as plantations (Cummins 2014:59-60; Morris 2012:53-4). The Company's marketing of Louisiana created one of the first economic bubbles, known as the "Mississippi Bubble" (Cummins 2014:51). While thousands of investors in France bought shares in the Company, thought was not given to financing the development of Louisiana. Thus, as expenses in Louisiana increased, the Company could not pay dividends on all the stock it sold, causing the downfall of the Royal Bank in France and the burst of the "Mississippi Bubble" (Cummins 2014:51).

One of the most important crops that the French cultivated to shape the landscape and culture, and which some of the slaves already knew how to plant, was rice, which sustained the people, supported the creation and expansion of export trade in sugar, cotton, tobacco, and indigo, and convinced the royalty and elite of France to invest in Louisiana (Morris 2012:49). While French colonialists originally cultivated rice as a means to adapt to Louisiana's environment, rice cultivation soon became forced upon the wetlands and laborers (Morris 2012:53). The French turned the lower Mississippi Valley into dry land for rice fields. Rice initiated the transformation of French Louisiana from a colony based on trade with the Indigenous population into a colony based on agriculture (Morris 2012:77).

The influence of the French colonialists was still apparent today in the importance of rice to Louisiana cuisine. Rice serves as a base for most meals for Louisiana's tribal and other coastal communities, with many people having rice makers on the kitchen counter, filled with rice ready to serve with fried fish, shrimp, or crabs. The West African influence is also quite apparent, with some of the famous Louisiana cuisine, such as gumbo, being similar to West African stews.

Starting in 1754, the Seven Years War, otherwise known as the French and Indian War, between England and France increased colonial interest in the southeast region. England's policy towards Indians during this period served as a model for the United States' Indian policy following the American Revolution (Saunt 2004:138). The 1763 Peace of Paris ended the Seven Years War and France transferred Louisiana to Spain (BIA 2008a). The Spanish colonialists converted Indigenous peoples to Catholicism and made them subjects of Spain (Saunt 2004:134).

By the late seventeenth century, the Chitimacha tribe, who were fishers, farmers, and hunters, occupied territory between Bayou Teche and Bayou Lafourche in Louisiana (Brightman 2004). After Spain gained control of the region, Spanish colonial rulers informally agreed to protect the Chitimacha's territorial rights; however, extending these rights implied that such rights could also be taken away (Hoover 1975). The Chitimacha were subsequently mostly ignored by public officials and not documented in official recordings (Hoover 1975).

The Choctaw Indians in the present day state of Mississippi were under French colonial rule from 1750 until the end of the French and Indian War in 1763. They were under British rule until the Revolutionary War, when they were taken under U.S. rule. Between 1763 and 1773, the British expanded colonies along the Atlantic coast, forcing significant land cessions by the Creek, Choctaw, Chickasaw, and Cherokee tribes. These land cessions preceded the larger land cessions that occurred after the American Revolution (Cummins 2014:21; Saunt 2004:138).

Displaced by the colonialists, Indigenous peoples from around the southeast region moved into present-day east-central Mississippi, joined the Choctaw group, and established grounds for farming and hunting (Saunt 2004:132). The Choctaw lived in small family groups clustered in villages of huts (Cummins 2014:22). Both men and women planted and harvested the crops and gathered medicinal plants. Women wove baskets out of cane (Cummins 2014:22). During the fall and winter, hunting activities took place, while they fished and gathered wild fruits and plants during the summer (Galloway and Kidwell 2004:501).

The Treaty of San Lorenzo in 1795 placed most of the Choctaw's land within the U.S. (Miller 2011). The Choctaw were further cheated out of land when the U.S. redrew the land boundary north-south, instead of parallel to the river, which ran northeast-southwest. By redrawing the line this way, the U.S. obtained more of the Choctaw land before Andrew Jackson's administration forcibly removed the Choctaw people (Miller 2011), as discussed in more detail below.

Historians have suggested that after Britain took over territory from the French in 1773, many of the Biloxi, some Choctaw, and neighboring tribes migrated west across the Mississippi River to Spanish territory and down the marshes of south Louisiana (BIA 2008a). By the end of the 1700s, Biloxi peoples had migrated to central Louisiana (Brain et al. 2004). Some Chitimachas are believed to have moved to upper Bayou Lafourche, just to the east of Bayou Pointe-au-Chien, during the eighteenth century (BIA 2008a). Elders from Isle de Jean Charles told me how Bayou Lafourche was originally called the Chitimacha River. Despite Louisiana being Spanish territory at this time, there were still many French immigrants who remained.
The Acadian Migration

Members of Isle de Jean Charles, Grand Caillou/Dulac, and Ponte-au-Chien Tribes are not only descendants of Indigenous peoples of the southeast, but also Acadians. Sitting out on his elevated porch, Jean, an elder from Isle de Jean Charles, said,

What it was, [the Acadians] were in Nova Scotia and then when they had a *Grand Dérangement*, when the British wanted the land for themselves and they wanted them to be loyal to the queen at the time and the people said no, so they rebelled...And the Naquins supposedly, my side of the family, was shipped back to France, some was shipped back to France. Then after enough time they came back this way and I think they settled in New Orleans area at first and then migrated down. So they were here and mixed up with the other Cajuns, but then one of the brothers married an Indian girl, then they isolated him from them. And in order to have peace and also looking for more land to trap and easy access to fishing and everything, he managed to migrate here to the Island, Isle de Jean Charles. And it's called after him, Jean Charles, which was our great-great-grandfather...So they came over this way and started their family and then others migrated over here too and built a community.

The Acadians originated during the sixteenth and seventeenth centuries in the colony of Acadia in French-controlled Canada. The colony was placed under British control in 1713, by which time the Acadians had become a culturally distinct, French-speaking people. The Acadians' diaspora, known as the *Grand Dérangement*, was largely the consequence of the Acadians' refusal to become part of the Anglo-French imperial wars in North America during the eighteenth century. Starting in 1755, many Acadians were forcibly removed by the British from the French colony of Nova Scotia and sent to France, other British colonies, and the West Indies.

Thousands of Acadians arrived in Louisiana during the 1770s and 1780s when the territory was controlled by Spain. Not wanting to be part of the urban economy, having been farmers, fishers, hunters, and trappers, many Acadians, or as they came to be known, Cajuns, were brought to Louisiana in 1785 by the Spanish government to serve as a buffer against a British invasion (Brasseaux 1985; De Caro 1998). Upon their arrival in Louisiana, the Spanish government provided them material assistance to establish farms. Many Acadians moved out of

New Orleans and along the bayous to escape British persecution. By the latter part of the 1700s, the Acadians had developed into the predominant cultural group in south Louisiana (Brasseaux 1985, 1991). Most Acadians settled west of the Mississippi River in the bayou areas along the southwestern prairie, developing a rural lifestyle based on farming and hunting (Cummins 2014:86-7).

The Acadian settlements existed near settlements of Indians, Creoles, African and Caribbean slaves, and Canary Islanders, known as Isleños (Brasseaux 1985). The same immigrant policy that brought an influx of Acadians to Louisiana also brought Isleños from off the coast of Spain. In 1777, the Spanish government called for the immigration of about 700 Isleños to Louisiana to increase the population of the colony (Cummins 2014:87). During the latter part of the 1700s, the Isleños in southern Louisiana grew sugar cane as their major source of income. Many of them were forced to sell their land to Creole and Anglo investors who established large sugar plantations. Dispossessed of their land, many Isleños became plantation workers, sugar refiners, fishermen, and hunters (Cummins 2014:88).

Among those who came to Louisiana through the Acadian exile and migration, Jean Charles of Port Royal, Acadia was forcibly removed by the British in 1758 and sent to France. Jean Charles, who married Madeleine LeBoeuf, a French woman, was on board the St. Remi ship, which arrived in New Orleans from France in 1785. Jean Charles and Madeleine's second son, Jean Marie Naquin, married Pauline Verdin, an Indian woman, and they settled in Montegut and then on Isle de Jean Charles (Ledet 1982). As Maurice explained, "the Naquins married Indians and their families didn't want anything to do with them...They was disowned by their families so they moved over here. One of them, Jean Marie is the one that moved [to Isle de Jean Charles]."

Intermixing Between Indians, Acadians, and the French

Marriages between French and Acadian, or Cajun, men and Indian women were common during this time period. As Pierre, an elder from Isle de Jean Charles, explained to me one day while we sat out on his elevated porch, "Those European people came down here, they didn't have a wife, so they had to find them a wife. So they married an Indian woman, they took an Indian woman."

Men who were originally from present-day Canada often married Indian women to incorporate themselves into Indian trade and kinship networks. The majority of French immigrants were men and there were also official practices that led to these marriages, such as young French boys being sent by French colonialists to live in Indian villages to act as interpreters (Cummins 2004:23; Spear 1999:37). French men also exploited Indian women through the slave trade (Spear 1999:39). Colonial administrators were concerned with how these relationships would impact establishing Louisiana as an economically valuable colony. With the shift from the fur trade and resource extraction to agriculture, relationships between Indian women and French men were deemed unacceptable by French administrators because of racial, cultural, and property concerns (Spear 1999:51). Many of the Indian groups were matrilineal societies, therefore, the children of a French man and Indian woman were accepted as a full member of the Indian group (Williams 1979b:15).

Missionaries also influenced Indian relations (Williams 1979b:16). The Catholic missionaries that arrived in the late seventeenth and early eighteenth centuries, while against relationships between French men and Indian women, also pressed the need for assimilating Indians into French civilization (Spear 1999:44). In particular, the missionaries targeted for conversion children of mixed marriages between the colonial men and Indian women (Williams 1979b:16). As the Indian population in Louisiana decreased in the 1700s and the black

population increased with the slave trade, colonialists and missionaries shifted their concern to relationships between white men and black women (Spear 1999:50-1).

Seeking a "region of refuge" or ecological shelter (Vélez-Ibáñez 2004), ancestors of the three tribes intermixed in the Terrebonne and Lafourche areas in the late 1700s (Terrebonne Life Lines 1998; Westerman 2002), and also mixed with the French and Acadians. Thus, the tribes today were often referred to as French Indians. As explained to me by tribal leaders and elders, some of the early Indian ancestors that tribal members traced back to from the late 1700s are Joseph Houma Courteau, also called Touh-la-baye, of the Biloxi nation,³ Joseph's wife Marie Ann Pierre, who was Acolapissa, and their daughter Rosalie Courteau, Biloxi-Acolapissa. As Maurice, who had relocated to Houma from Isle de Jean Charles, told me, while doing research for Isle de Jean Charles' federal recognition process, "we traced Joseph Houma Courteau where he was born. According to the records that was kept, he was born in Natchez, Mississippi and kept moving down down until he got down here." Marie Gregoire, wife of Alexandre Verdun, one of the early settlers of the area, was thought to be Chitimacha,⁴ as well as Marianne Iris, wife of Jean Baptiste Billiot, another early settler. It is believed that the tribes' Choctaw roots trace back to Shulu Shumon, a Choctaw chief; and their Atakapa roots come from Marie Therese, wife of Jean Baptiste Verdun, an early settler in the area.

Separating Land and Water

By 1800, Napoleon Bonaparte had emerged as the leader of France and wanted a new French empire in the Americas centered around Louisiana. With the Treaty of San Ildefonso in

³ Note that the names are spelled differently in different documents and people are referred to by different names. For example, Joseph Houma Courteau is sometimes referred to as Touh-la-bay or Toup-la-bay; Alexandre Verdin's last name is sometimes spelled Verdun; and Biloxi nation is also written as Beloxy nation.

⁴ Alexandre Verdun's will of 1829 bequeathed land to his children he had with Marie Gregoire, a "savage woman," meaning an Indian woman (Morrison 1984).

1800, Napoleon forced Spain to transfer Louisiana back under French control (Cummins 2014:97). While Louisiana was under Spanish control, the Spanish colonialists kept documents delineating land grants in Louisiana. However, without the existence of Indian land boundaries or maps, the French ignored these documents when Louisiana was transferred back under French control (Cole and Sutton 2013:20).

The French colonialists learned from the Indigenous people how to survive in the wetlands, but pursued plans of turning the lower Mississippi Valley into dry land (Morris 2012:45). The French settler Joseph Villars Dubreuil was the first person to put slaves to work on a levee system to drain land for agricultural development. Colonialists soon considered such a system as fundamental for productive agricultural development in the lower Mississippi Valley; separating land and water gave the French more control over both. Whereas landowners first built houses on high ground fronting the river, they moved the houses back to make room for levees, placing the houses into lower lying areas and greater risk of inundation, necessitating still higher levees (Morris 2012:59, 95).

During the winter, slaves on the plantations were put to work building levees and cutting cypress to turn into lumber. Deforestation increased rain runoff, reducing flooding where land was cleared but increasing flooding downstream. Such a process demanded more tree clearing and more levees and ditches. French and Spanish colonial rule made levee construction a legal indication of land ownership (Morris 2012:62-3, 95, 140).

When the lower Mississippi Valley was still under Spanish control in the late 1790s, Spanish colonialists debated whether or not to interfere with the flow of the Mississippi River. French engineers believed in exploiting natural courses without really altering them, whereas engineers working for the U.S. followed the British tradition that held canals were superior to

rivers because they were easier to control (Morris 2012:97-101). The U.S. ideal of river management won after the French sold Louisiana to the U.S. in the 1803 Louisiana Purchase.

Absorption into the United States

Driven by a desire to expand American trade, U.S. President Thomas Jefferson decided that the U.S. would need to find a way to take control of New Orleans, which served as an important port for commerce (Cummins 2014:97). The U.S. negotiated a treaty with France and bought the Louisiana territory for \$15 million (Cummins 2014:97-8). The Purchase joined New Orleans with lands west of the Mississippi River and placed it under U.S. control (Cummins 2014:10).

Louisiana became a state in 1812. The first Louisiana constitution created a state government designed to keep the framers of the state constitution and those similar to them in power; only white men of property could aspire to office and only those who paid taxes could vote (Schafer 2014:125). Catholicism dominated the colonial period and continued to dominate south Louisiana during the antebellum period, from 1812 until the start of the Civil War in 1861 (Schafer 2014:169).

During this time, the majority of farmers in Louisiana operated at a subsistence level, owning the land they worked (Schafer 2014:162). Planters cultivated sugar along the banks of the Mississippi River and the bayous of south Louisiana, with most slaves in Louisiana working on sugar and cotton plantations (Schafer 2014:157, 181). The American colonialists concluded the process of drying the lower Mississippi Valley for cotton plantations nearly two hundred years after the French started the process for rice fields (Morris 2012:89).

The increasing value in the market for cotton and expansion of transportation and new technologies put further demands on the acquisition of Indian lands in the southeast (Dowd

2004:142). Following the 1789 ratification of the U.S. Constitution and passage of the 1790 Indian Trade and Intercourse Act, which was often ignored, the U.S. federal government controlled Indian policy. Pursuing evermore westward American expansion, Secretary of War Henry Knox promoted the transformation of Indigenous peoples' economies into intensive agriculture, white American education, and the private holding of land (Dowd 2004:143). Between 1780-1797, under President George Washington's administration, a federal program was put in place to "civilize" Indigenous peoples and government trading posts were set up to persuade Indigenous peoples' dependence on American goods.

President Jefferson continued these programs in the early 1800s, encouraging Indians to take on debts that could be paid off by granting lands to the U.S. (Dowd 2004:143; Williams 1979b:16). Lands that were once held communally came under private landholdings. However, Indians were not immune to perpetuating subjugating forces, as elite Indian households also owned black slaves (Dowd 2004:143). These processes, along with black slavery, changed the production and division of labor in tribes. Becoming assimilated into western forms of structure changed gender roles and decreased women's roles in tribal affairs. For example, the Cherokee tribe adopted its first written law in 1808, which provided for patrilineal inheritance of land, despite the customary matrilineal traditions (Dowd 2004:144).

The push towards widespread agricultural development called for vast, vacant lands. Thus, acquiring Indian lands for such expansion became a major focus for President Jefferson (Hirsch 2009:56). Jefferson pursued a policy for obtaining Indian lands east of the Mississippi River. His representatives first encouraged Indians to adopt agricultural practices that would require less land than hunting. No longer needing hunting land, the government agents persuaded Indians to sell their open lands. To further enhance Indian consumers' dependence on the U.S.,

Jefferson had more government trading posts built near Indian villages. Jefferson's policies and strategies towards Indians led to nearly a dozen tribes ceding approximately 200,000 square miles of land, leaving the Indians with two choices: forced assimilation or removal (Hirsch 2009:57). The Louisiana Purchase provided the means for Jefferson's administration to remove Indians from the east of the Mississippi River to the west and Jefferson's strategy paved the way for Andrew Jackson's formal national Indian removal policy (Dowd 2004:146-8; Hirsch 2009:58).

An Era of Indian Removal

Before Andrew Jackson was elected president of the U.S., Indian removal was negotiated between the federal government and tribal authorities. However, once Jackson came into power, states began to pass laws abolishing tribal existence and extending the state's jurisdiction (Dowd 2004:148). Leading up to the passing of the Indian Removal Act of 1830, President Jackson argued for the Act's passage based on negotiating state and government affairs, westward expansion, and viewing Indians as inferior to the Anglo race,

[The Act] puts an end to all possible danger of collision between the authorities of the General and State Governments, on account of the Indians. It will place a dense and civilized population in large tracts of country now occupied by a few savage hunters. By opening the whole territory between Tennessee on the north, and Louisiana on the south, to the 'settlement of the whites, it will incalculably strengthen the southwestern frontier, and render the adjacent States strong enough to repel future invasion without remote aid. It will relieve the whole State of Mississippi, and the western part of Alabama, of Indian occupancy, and enable those States to advance rapidly in population, wealth, and power. It will...perhaps cause [Indians] gradually, under the protection of the Government, and through the influence of good counsels, to cast off their savage habits, and become an interesting, civilized, and Christian community (Jackson 1830).

Jackson's position on Indian removal was met with some debate. For example, the North American Review published an article discussing the injustice of such forced removals and that injustices would continue to be carried out if such policies of removal were pursued, If they may now be dispossessed of their original inheritance, because they are within the chartered limits of states, they may hereafter be driven from the lands which they shall receive as a grant from the General Government, because they will then be within the national limits of the United States...Constitutional scruples now exist in one shape. Twenty years hence they will exist in some other shape; and, in whatever shape they exist, they may be made the pretext for taking Indian lands, unless compacts are to be executed according to the intention of the parties, clearly expressed in the compacts themselves (North American Review 1830:440).

Despite this debate, on May 28, 1830, the Indian Removal Act passed through the U.S. Congress, "An act to provide for an exchange of lands with the Indians residing in any of the states or territories, and for their removal west of the river Mississippi" (U.S. Congress 1830). The 1830 Indian Removal Act provided the U.S. president with the authority to influence Indian tribes to give up their lands for new lands west of the Mississippi River. It also enacted that the federal government would not play a role in preventing states from forcibly removing Indians occupying territory within the state's borders (Dowd 2004:148). Thus, Indian policies blended into a larger power struggle between the federal and state governments (Williams 1979b:16).

After Congress passed the Indian Removal Act of 1830, thousands of Indigenous peoples were forced out of their ancestral lands in the east across the Mississippi River to lands in the west. The forced removal included, but was not limited to, many members of the Choctaw, Cherokee, Creek, Chickasaw, and Seminole nations. The Choctaw were the first Indians to migrate west into the Indian Territory, the present-day state of Oklahoma. The migration route, dubbed the Trail of Tears, was approximately 900 miles and took about nine months to complete. Tens of thousands of Indigenous people lost their lives along this journey, dying along the way from diseases such as tuberculosis, dehydration, and other adversities (Blackburn 2012). For those who survived, the government-dictated removal and reservation boundary limits led to intense loss of cultural identity and sense of place (Bartrop 2007:184-5). For example, the Choctaw described their new lands in the west as "the Land of Death" (Akers 1999:73).

The majority of Choctaws moved but some remained in Mississippi and Louisiana, seeking refuge on what would become highly contested land allotments only guaranteed for five years (Dowd 2004:149; Martin 2004). The 6,000 Choctaw that remained were pushed onto unproductive lands, so some joined those moving to Oklahoma. A portion of this group only went as far as Jena, Louisiana, eventually forming the Jena Band of Choctaws (Finger and Perdue 2004:152). Individual Indians and families in the southeast that avoided removal and assimilation were ignored if they fled to lands of marginal value, such as the swamps (Williams 1979a:198).

The Trail of Tears also came to symbolize the forced removals of the three tribal communities' ancestors. For example, as François, an elder from Grand Caillou/Dulac who had relocated over 100 miles east, explained, "My grandma remember the Trail of Tears where they picked up all the Indians and put them on reservation. My grandmother told me they moved into swamp because didn't want to be taken away. Explorers weren't brave enough to go into swamps." During this time, the ancestors of Isle de Jean Charles, Grand Caillou/Dulac, and Pointe-au-Chien Tribes were pushed farther south down the bayous in present-day Terrebonne and Lafourche Parishes.

The word "bayou" originates from the Choctaw word "bayuk," referring to a slowmoving stream that flows back and forth as the tide goes in and out. Louisiana's bayous served as a region of refuge for the tribes' ancestors to escape to the dense forested swamps deemed uninhabitable by colonial settlers. The ancestors established settlements at the southern ends of the bayous, with families living in small clusters, maintaining a fishing, trapping, hunting, and farming subsistence-based culture. The tribes had a wealth of ecological and economic resources, such as barrier islands, extensive estuaries, and an abundance of fishing resources.

Each settlement became socially distinct, with each community creating a strong social network and core family line, which ties the particular community together. Once people escaped down the bayous, they were physically and socially isolated from communities and political relations farther north. The tribes' ancestors only traveled north to populated areas when absolutely necessary (Truehill 1978). While this isolation helped to define distinct cultural groups and shielded residents from issues occurring throughout the country, it has also caused problems for the tribes in proving criteria needed to receive federal recognition, as discussed in more detail in chapter three. The settlements grew in size with people tending to have many children, such as six or twelve children per household. While the settlements remained distinct, there was some intermixing between groups.

During the U.S. Civil War, from 1861-1865, Louisiana seceded from the Union. For the vast majority of people in Louisiana, the war led to widespread poverty, which continued to be institutionalized for decades through the sharecropping and crop-lien systems (Schafer 2014:226). The Reconstruction era following the Civil War deepened the racism in Louisiana and produced more corruption in Louisiana politics. The same people who controlled power in the state before the Civil War maintained power after the war, including large-scale rural planters and the financial and commerce sector centered around New Orleans (Schafer 2014:226).

In the mid-1800s, an array of small and intermixed Indian groups lived in Louisiana, although they were not given specific reference in written records, as Indians were labeled as "colored" during this time. While this era, for the most part, did not directly impact Indian groups in southern Louisiana (Williams 1979a:200), it did have a great effect on the human-environment relationship.

Controlling the Ecosystem

Most of the land in the lower Mississippi Valley came under the possession of whites following the Civil War. These landowners succeeded in obtaining congressional support for federal flood control by defining levees as being primarily for the purpose of supporting navigation. Control of the Mississippi River was bolstered as being in the nation's interest for the flow of commerce and westward expansion. The flood of 1849 led to debate over whether or not to control the Mississippi River. But when the Mississippi Delta was flooded under three feet of water in 1858 after the Mississippi River broke through levees in three dozen places, it was not a question of whether or not to control the river, but how (Morris 2012:140-154). Controlling the Mississippi River was perfectly suited to the nineteenth century ideals in which humans honed the belief in their rule over the natural world (Barry 1997).

The Swamp Acts of 1849 and 1850 were the first major steps by the U.S. government focused on flood control in the Mississippi Valley. These acts gave the U.S. government control to transfer unsold swampland to state governments. The state could then sell the land to private interests, with the condition that revenue from the sale of the land be used to fund flood control. However, flood control remained a secondary priority to settlement and cultivation. Following the passing of the Swamp Acts, the state governments of Louisiana and Arkansas established state levee boards and commissions (Morris 2012:141-2). Thus, the federal and Louisiana governments entered the Industrial age with new policies and technologies to further the interests of private landowners and political elite.

Also during this time, the first commercial oil refinery was built in Pittsburgh in 1854, followed by the current version of oil drilling originating in the U.S. in 1859, and the first offshore oil wells drilled just off the coast of Santa Barbara, California in 1898 (Freudenburg and Gramling 2011). Major parts of the first platforms built in the Santa Barbara channel were

exported from Louisiana, where the offshore oil industry was invented and developed (Freudenburg and Gramling 2011:131).

Louisiana and the Age of Industrialization

During the 1800s, the Indigenous peoples of southeastern coastal Louisiana fished in the summer months and trapped in the winter months, as well as hunted and farmed. Ancestors from the Isle de Jean Charles, Grand Caillou/Dulac, and Pointe-au-Chien Tribes were often mistakenly lumped together and labeled as Houma Indians in recorded history during this time period, based on John Swanton's work during the early 1900s, as will be discussed in more detail in the federal recognition section in chapter three. By the late 1800s, Indian groups living in Louisiana had largely become "invisible"; European populations in Louisiana ignored the tribes, who maintained their culture in isolated and private locations (Cummins 2014:23). By the early 1900s, the majority of Indians in Louisiana and the rest of the southern U.S. did not have common land or a formal relationship with the federal or state governments.

In 1890, the first official segregation law, commonly known as Jim Crow, was passed in Louisiana that required all railroads carrying passengers to provide "separate but equal" accommodations for white and "colored" people (Haas 2014:252). The presence of Indians as another racial group in the region muddled the bi-racial Jim Crow laws. Local whites and officials in Louisiana, as well as federal government officials, racialized Indians as "colored," diminishing tribal rights and creating challenges for Indians to establish their place in a society that labeled itself as bi-racial (Klopotek 2011; Perdue 2012:9; Williams 1979b:23). Theresa, from Pointe-au-Chien, described how this situation was highlighted for her, as well as many other Indigenous peoples from the region, when she told me about how most hospitals only provided two racial options for people to check on a birth certificate: white or black.

Structuring society bi-racially forced a wedge between Indians and blacks in the southern U.S., including Louisiana (Perdue 2012:10). In a complex web of colonialism, political status, and racial structures, Indians often engaged in anti-black racism to separate themselves from blacks in fighting for educational and economic opportunities (Klopotek 2011). If the state and local governments wanted to take over Indian lands, they tried to label Indians as "colored" to give them an even lower socioeconomic status, which led to Indians creating more social distance between themselves and blacks to try and retain their lands (Williams 1979a:198). By keeping Indians and blacks from coming together, the white minority could readily retain power (Williams 1979a:202). Indians who married blacks were generally ostracized from their community and moved into a black community. When Indians married whites, the couple could merge into a white community by moving to another area or, if stayed in their original area, they typically merged into the Indian community (Williams 1979a:202).

Also at this time, following more severe floods in Louisiana in 1874 and a hurricane in 1893 that killed over 2,000 people in southern Louisiana and Mississippi, the USACE and Mississippi River Commission promoted building levees. The edges of plantations were targets for flood relief and levee building, enabling the spread of cotton fields and deterioration of remaining forests and wetlands. Former slaves who lived on the edges of plantations lost their hunting and fishing grounds and were thus forced to work on the plantations (Morris 2012:161). In the late 1800s, steam-powered dredges cleared 13,000 acres of swampland in Terrebonne Parish (Morris 2012:120). Continuing the French trend, rice and sugar fields replaced forests and swamps south of Baton Rouge, along the Mississippi River, and Bayou Lafourche (Morris 2012:120).

In the 1860s, the first commercial shrimp drying platform and canning factory opened in southern Louisiana (Perret et al. 1993). The gear used to harvest shrimp continued to be developed and new technology emerging at the turn of the twentieth century, primarily the otter trawl, expanded the industry (Perret et al. 1993). In 1895, individuals and corporations purchased a lot of the swampland in the southeast from the Atchafalaya Levee District. Starting in the 1920s, the new landowners required the Houma trappers, which included ancestors of the three tribes, as noted earlier how they were mistakenly lumped together, to lease trapping areas or work for low wages (Campisi 2004:638).

The rise of the Industrial Revolution brought changes that stimulated the desire to control rivers and waterways across the country and exploit the nation's natural resources (Billington and Jackson 2006:4-5). Following the flood of 1917, the Flood Control Act of 1917 provided federal money for levee construction for commerce and navigation, as well as flood control. It was agreed that once the levees were built, the states would maintain them (Morris 2012:164). By the late 1920s, the Bureau of Reclamation and USACE promoted dams to serve multiple purposes, but the impetus for political support included the hydroelectric power revenue (Billington and Jackson 2006:6-7). To prevent annual flooding, the USACE dammed Bayou Lafourche at Donaldsonville, turning the distributary system into a stagnant waterway (Campisi 2004:638)

In 1927, the worst flood and arguably the greatest disaster in U.S. history occurred, inundating over 20,000 square miles of land and displacing over 600,000 people (Barry 1997). Following the Great Mississippi Flood of 1927, Congress appropriated funds for levee reconstruction and the Mississippi River and Tributaries Project (Morris 2012:166). The Flood Control Act of 1928 gave the federal government control to seize lands needed for easements

and rights of way, providing landowners with compensation in return. Thus, private property was taken by the federal government and developed to protect national interests (Barry 1997; Morris 2012:167). The levees worked to segregate land and water, as well as further separating whites and blacks based on ownership of dry land, perpetuating Jim Crow policies. Following the 1927 disaster, the Mississippi River Commission, USACE, and the federal government pursued a river management strategy that kept the water out, the land dry, and the black laborers within its boundaries (Morris 2012:168).

Flood protection levees were built and dam and reservoir construction on major tributaries took place along the Mississippi River, along with channels and navigation canals, such as the Houma Navigation Canal in Terrebonne Parish and the development of the Mississippi River Gulf Outlet. Kerry St. Pé, the Executive Director of BTNEP, described how, following the 1927 flood,

People blame the Corps of Engineers for building levees but they forget at the time the people demanded the levees be built. Big corporations, big land corporations, agricultural corporations wanted their land protected. So it got protected. There was pressure from the major land corporations. It was an easy sell. Yeah, we gonna protect y'all from flooding. It's like how every environmental decision is made even today. Pressure from the big corporations, the rich.

The beginning of the Industrial era was also marked in Louisiana through exploitation of natural resources, including petroleum, natural gas, sulfur, salt, and timber. By 1888, more than 1.7 million acres of Louisiana timberland belonged to forty-one northern lumber companies that had already exhausted the forests of the Great Lakes region (Haas 2014:315). Larger companies typically moved on after clear-cutting the land, devastating forests with no thought to reforestation (Haas 2014:316). Drying the land and deforestation meant the need for fertilizers to supplement the once rich soil and minimal barriers to insects in the lower Mississippi Valley,

requiring farmers to use chemical pesticides, which flowed into the Mississippi River, contaminating the water and inhabitants downstream (Morris 2012:183).

Scientists have raised issues about such river management systems since the systems were put in place, as well as problems with viewing water piecemeal instead of as a whole system. In 1928, Percy Viosca Jr., a biologist, wrote, "man, interfering with nature, has created new conditions of existence in our wet areas, and that further decline is inevitable unless some effort is made to restore the former state" (216). River management to dry up the land was thought necessary for the development of new agricultural communities. Combined with the impacts from the built levees and agricultural drainage, by 1928 eighty-five percent of the 14.5 million acres of upland forests were cut, resulting in more rapid run off and more serious droughts and floods. As a result, "Louisiana bears the brunt of the consequences due to flood protection, drainage and deforestation that occurred in the 1,325,000 square miles of the Mississippi valley" (Viosca Jr. 1928:229). In addition to the deforestation, canals were cut to remove the timber from the swamps and for navigation purposes and channels were deepened for drainage, resulting in erosion of the natural ridges and coastal land (Viosca Jr. 1928:229).

Furthermore, in 1901, thirty miles from the southwest corner of Louisiana, in Beaumont, Texas, the first oil gush occurred, marking the beginning of the modern petroleum industry in the U.S. Oil exploration immediately began in Louisiana, with the state's first oil field discovered in 1901 near Jennings in southwest Louisiana (Haas 2014:316-7). In 1916, a large natural gas field was discovered near Monroe in northern Louisiana. Most of Louisiana's petroleum production at this time came from northwest Louisiana. By 1922, Louisiana's annual petroleum production made up eight percent of the total production in the U.S. (Haas 2014:317-18). While Louisiana's gas deposits were much more widespread than the state's petroleum reserves, in the early twentieth century drillers considered natural gas worthless because it had no market (Haas 2014:318-19). The passing of the Mineral Policy Act of 1920 authorized the federal government to offer a ten-year lease of federally-owned lands to private individuals and companies to extract petroleum and other minerals (Freudenburg and Gramling 2011:87).

The Continued Growth of Industrialization

The 1930s saw a continuation of the flood control measures enacted in the 1920s around the country. In response to the Great Depression, President Roosevelt's New Deal, focused on economic recovery and job creation, included the establishment of a large public works program, and the constructions of dam and reservoir projects throughout the country. Most significantly, the Tennessee Valley Authority, the federal government's most widespread and comprehensive river valley development program, was enacted in 1933, which authorized the construction of "dams, and reservoirs, in the Tennessee River and its tributaries ...[to] control destructive flood waters in the Tennessee and Mississippi River drainage basins" (Tennessee Valley Authority 1961:4).

Aiming to control the Tennessee River, the federal government, through the Tennessee Valley Authority, purchased vast amounts of land under eminent domain to construct dams and reservoirs, displacing thousands of families, including subsistence farmers and their tenants (McDonald and Muldowny 1982). The Tennessee Valley Authority's model of controlling waterways to form a productive landscape for economic benefits jumpstarted the post-World War II global interest in constructing large dams (D'Souza 2008), as well as served as the model for controlling waterways in the Mississippi Delta, including coastal Louisiana.

Another important element that changed the landscape during the 1930s and 1940s was the expansion of nutrias throughout coastal Louisiana, both intentionally spread by humans and

by nutrias migrating from fur-ranches (Holm Jr. et al. 2011:3). In addition to being fishers, farmers, and hunters, the tribal residents' subsistence-based livelihoods at this time was also focused on trapping, predominantly nutrias and muskrats. Families had a base in one location, but moved around the local area between fishing and trapping seasons. All family members contributed to the process of trapping, drying, and selling furs. While nutrias were an invasive species damaging the marsh, the negative environmental effects were not well understood at the time, and the tribal members came to rely on the income from the fur sold from trapping and skinning nutrias, partially moving from a subsistence-based livelihood into a cash economy. Also in the late 1930s, large offshore shrimp boats currently used by industrial shrimpers were introduced in the Gulf of Mexico to develop the offshore shrimping industry, occurring first off the Florida coast (Landry 1990).

However, tribal families still relied on catching seafood and maintaining gardens that were an important part of community life, subsistence, and sense of pride. People talked about growing butter beans, green beans, lima beans, potatoes, cantaloupe, watermelon, okra, cucumbers, peas, mustard greens, carrots, corn, and rice. Gardens helped shape the local landscape, with crops being grown between every house.

Timber, oil, natural gas, salt, and sulfur have continued to play a central role in Louisiana's economic development, but control of their extraction, refining, and marketing remained largely in the hands of people residing in other states or countries. This structure of economic colonialism has meant that outside capitalists profited more from the extraction of these natural resources than the state of Louisiana or its citizens (Haas 2014:320). Another trademark of Louisiana at this time was dictatorial control of state government, promoted by Huey Long, Louisiana governor from 1928-1932 and senator from 1932-1935. This centralized

governance structure stemmed from the French and Spanish strategy of executive central control of government (Haas 2014:299).

The widespread poverty in Louisiana in the 1930s greatly contrasted the financial gains the government and corporations reaped from the state's natural resources, with Louisiana ranked second behind Texas in the U.S. at this time in value of its natural resources (Kurtz 2014:350). The state government leased its mineral resources to a variety of industries and Governor Huey Long placed severance taxes on minerals extracted from state land (Haas 2014:320-1; Kurtz 2014:350). While these taxes provide much of the revenue to fund public services in Louisiana today, it has also left the state and its citizens vulnerable to extreme market fluctuations (Haas 2014:320-1).

The passing of the Submerged Lands Act of 1953 gave states title to offshore lands within three miles of the coastline (Freudenburg and Gramling 2011:101). After the federal government claimed legal ownership of all reserves of crude oil and natural gas located three or more miles away from the coastline, President Harry Truman offered Louisiana 37.5 percent of all revenue derived from offshore oil and gas if the state would not dispute the federal claim. Huey Long, following the advice of the Plaquemines Parish Assistant District Attorney Leander H. Perez who disagreed with Truman's policies on race, rejected the offer and instituted a lawsuit in the federal courts, leaving Louisiana without any revenue from the offshore reserves (Kurtz 2014:350).

Also during this era, under the Indian Reorganization Act of 1934, the Office of Indian Affairs decided who was or should be under federal jurisdiction and how to make that determination, although such actions were already in practice (Klopotek 2011:19). The Act

created a process whereby the federal government dictated tribal recognition, leading to the current tribal acknowledgment issue (Miller 2004), discussed in detail in chapter three.



Figure 12. School from the 1930s, Pointe-au-Chien. Source: Julie Koppel Maldonado, 2012.

In 1938, the Department of Interior conducted a survey focused on the education of the Houma Indians of southern Louisiana, which, as discussed previously, included at the time the settlements of the three tribes that are the focus of this study. The tribal population in the area in 1940 was approximately 2,000 people,

encompassing eighty miles east and west and as much as forty miles north of the Gulf of Mexico, with the core of the population residing in six settlements (Campisi 2004:638). The survey found that the Houma's economic earnings came from trapping and fishing. The Indian population was racially and geographically isolated, placed on the lowest end of the economic scale, and educational opportunities were nearly non-existent (Campisi 2004:638). In the 1930s, Bayou Grand Caillou had a school established by the Baptist Church (Campisi 2004:638). Pointe-au-Chien had the Catholic Mission School and the Live Oak Baptist School. The children from Pointe-au-Chien and Isle de Jean Charles attended these schools, with the children from the Island getting there by pirogue, a small boat carved out of cypress. Children from Grand Caillou/Dulac would also take a boat to get to their Indian school. However, many children only attended school for two or three months out of the year because they would then leave to go trapping or shrimping with their families.

Isle de Jean Charles had a Baptist Mission school in the 1930s and 1940s during the summertime when Chief Victor would bring teachers to the Island. The school was also the Chief's grocery store, which also served as the dancehall and church when the Catholic priest would come over from Montegut, about fifteen miles northwest.

The idea of the bayous being uninhabitable continued into the mid-1900s. For example, a reverend in Louisiana told of his first encounter with the area in the 1940s, speaking with the owner of a local general store,

I do not imagine that anyone lives there, in...

To the contrary, Father...You would be surprised to see how many families live out there...

But, how can people live in the swamps? How can I go to them?

Oh! You do not have to worry about them. They are Sabines, you know. Sabines? $^{\rm 5}$

Yes, this is the nickname for the Indians around here (Pelletier 1972:8).

The institutionalized segregation in Louisiana that the dialogue above alludes to increased each tribal settlement's social cohesion and resulted in residents having minimal contact with outsiders.

In the mid-1900s, signs appeared in Terrebonne Parish saying "No Indians," "No Colored Allowed," and "Whites Only" (Truehill 1978). The institutionalized segregation pervaded all aspects of the residents' lives. For example, while talking with Vivian, an elder from Dulac who used to work on a plantation, her son, Jesse, described how when he was growing up in Dulac, "the church, one side was for the whites, one side was for the Indians."

Indians continued to be pushed towards anti-black racism to secure their Indian identity (Klopotek 2011:8). One of the ways this most readily occurred during the New Deal in Louisiana was through Indians enrolling in white, not black, schools, reinforcing dominant social ideas about race, while weakening their own position as Indigenous nations (Klopotek 2011:12-13).

⁵ Sabine is a derogatory word that people in Louisiana call Native Americans.

For the elders from Pointe-au-Chien who grew up trapping, their families often migrated in the wintertime to St. Bernard Parish and other places in the region for weeks or months at a time to trap. Some stayed where they trapped, in places like St. Bernard and Violet, approximately ninety miles northeast of Pointe-au-Chien, because they were not as discriminated against and their children could go to the white public schools, which were segregated for whites and blacks, as opposed to Terrebonne Parish, which segregated by blacks, whites, and Indians. Others stayed closer to the communities but still moved farther north so as to not be considered Indians anymore. If a person lived in these particular settlements at the southern end of the bayous, they were considered Indian and low class, but once they moved out of the communities, especially those with lighter skin, they would not necessarily be seen that way.

World War II brought few changes to the Indians in the area, although several tribal members from the three tribes served in the military and left the area during the war to serve overseas. Some people moved to nearby cities to work in defense plants, but a lack of education and English severely limited their employment opportunities. Most Indian residents of southeastern Louisiana continued to live and subsist as they had for the previous decades, living together by extensive kinship networks (Campisi 2004:638). After World War II, many politicians supported ending federal obligations for recognized tribes, since they felt the war brought Indians into mainstream America. Some tribes were terminated from recognition, but other southeastern tribes wanted to obtain federal and state recognition (Finger and Perdue 2004:156).

In the 1930s, many Indians in coastal Louisiana were pressured to move by private developers to obtain land for oil rights, as well as fur-buying companies wanting to gain sole trapping rights (Stanton 1979:101). However, oil production in Louisiana's southern parishes

was minimal until after World War II and technology was developed to further offshore drilling (Haas 2014:318). After centuries of environmental transformation and resource exploitation, by the middle of the twentieth century, control over oil resources emerged as the dominant form of power in Louisiana and throughout the world.

CHAPTER 3

THE CONTINUED STRUCTURAL VIOLENCE AND LEGACY OF ATROCITIES

This chapter discusses events occurring from the 1950s to the present, working in conjunction with the previous chapter to provide the broader context for the historically- and economically-driven processes of structural violence and current experiences of the three tribal communities. It focuses on the spread of the oil industry across Louisiana during the second half of the twentieth century, accumulating environmental disasters, human-induced climate change, and the three tribes' efforts for federal recognition.

Big Oil Spreads Across the Scene

After the end of World War II in 1945, there was an immense growth of national energy consumption in the U.S. An increase in automobiles, urban sprawl into suburbs, highway construction, low prices for oil and gas, and consumerism of products such as televisions and air conditioning dramatically increased the demand for fossil fuels and electric power (Kurtz 2014:369). In the 1950s, this demand led to the creation of a vast petrochemical industrial complex in Louisiana along the Mississippi River between Baton Rouge and New Orleans and along coastal Louisiana with the construction of hundreds of oil and gas platforms to pump out crude oil and natural gas. With a seeming endless supply of natural resources, the state government encouraged industrial development and discouraged efforts to regulate industrial damage to the environment, permitting highly toxic chemical waste to be dumped into the Mississippi River (Kurtz 2014:369).

While the oil industry had been in Louisiana since the turn of the twentieth century, it was not until the 1950s that large-scale development for oil extraction occurred along Terrebonne and Lafourche Parishes and off the coast of Louisiana, with technologies developed for off-shore drilling post-World War II. Coastal Louisiana's economic activities were already dominated by extractive industries, such as logging, so the emergence of another extractive industry did not seem unusual (Freudenburg and Gramling 2011:135-6).

Also in the 1950s, as the offshore oil and gas industry developed, so too did the shrimping industry. Fishers found that shrimp were available in the Gulf of Mexico and not just the estuaries. Additionally, the development of the wing net for trawling greatly expanded the range that people could harvest shrimp; this technology led to the increase of recreational shrimpers and competition for shrimping locations affecting the local and commercial shrimping industry (Matherne 2013; Perret et al. 1993). The growing scale of the industry led to the Louisiana Department of Wildlife and Fisheries to establish seasons for catching white shrimp and brown shrimp and, in 1975, dividing the Louisiana coast into three zones for shrimp management (Perret et al. 2013). Shrimping seasons are also designated by specific areas, including inside waters, the outsider territorial sea, and the federal Exclusive Economic Zone (Louisiana Department of Wildlife and Fisheries 2014). The continued development of trawling technology in the 1990s, particularly skimmers, further escalated the competition and scale of change from a local subsistence activity to a large-scale commercial and recreational industry (Matherne 2013). The co-existence of the oil and shrimp industries is seen in events like the annual Shrimp and Petroleum Festival held in Morgan City, Louisiana every year (Freudenburg and Gramling 2011:132).

People from the three tribal communities often referred to how things were before the 1960s, before they started noticing the impacts from the oil industry, compared to how the communities and the water- and landscape were in 2012. For example, Madeleine, an elder from Pointe-au-Chien who had relocated to Montegut, talked about how after Hurricane Betsy in 1965

was when "it really started to wash off...[hurricane] feels stronger because there's no more land to kill it." Chief Albert described starting to see the land loss, "in the '60s because a hurricane would come and then where the canals are, the water would come in so fast, it would uproot the marsh and float it up here. And the trees were gone." As opposed to what Antoine, an elder from Pointe-au-Chien, described, how "you couldn't even see the sun through the trees," by the 1960s, when hurricanes hit, water would rush through the canals dug by the oil and gas industry to lay pipelines and for drilling barges, uproot the marsh, and take the land back out to the Gulf, leaving behind saltwater to kill the trees and erode the land. As the land sinks and the sea level rises, the roots of the trees are inundated by saltwater and can no longer get oxygen. Residents explained to me that the dead trees signaled that the land would soon be gone.

Chief Albert explained how when residents initially started seeing the environmental changes, they thought it would be okay,

It was bringing all the fish and crabs in and they could oyster further in and it was closer to home. The next thing you know the reason for that was because the saltwater was coming in so we got eaten up by the saltwater...probably by 1968 we seen that everything was starting to die and that saltwater was coming in, so the changes started with the first canal.

As time passed, the changes increased rapidly. Chuckie, the Chairman of Pointe-au-Chien, who had relocated about fifteen miles north to Montegut after Hurricane Juan hit in 1985, described how local residents noticed the changes starting to happen in the 1960s when he was a child but was not worried about it then because people did not know how serious things would be until they started seeing the trees dying and the pond getting bigger behind the houses. In the Pointe-au-Chien area, the U.S. Geological Survey, by comparing aerial photographs, found that much of the wetland loss occurred between 1969 and 1974 (Morton et al. 2005), following the mass development of channels and canals for oil and gas pipelines. After Hurricane Juan hit in 1985 and the area experienced increased flooding impacts, local residents started having their houses raised with the support of federal programs, religious organizations, non-governmental organizations, and private businesses.

Residents often related saltwater intrusion, digging canals, and land loss together. For example, as Pierre, an elder from Isle de Jean Charles, and Maurice, an Isle de Jean Charles Tribal Council member who had relocated to Houma after flood damage in the '80s, explained as we sat on Pierre's elevated porch on the Island,

Pierre: Back in my younger days you could walk way in the back past that, that was hard ground. But no more. And then after that when the saltwater start to come in.Maurice: Oil field came in.Pierre: Oil field come in and stop everything.Maurice: Start digging up all them canals and saltwater start coming in, saltwater intrusion.

The population in the area rose drastically in the middle of the twentieth century during the economic boom due mostly to oil extraction, as well as the expansion of the Intracoastal Waterway and the Houma Navigation Canal (Solet 2006). According to the 1930 U.S. Census data, Terrebonne Parish had 29,816 people, whereas there were 60,771 people by 1960 (Family Search 2014). The discovery of oil attracted outsiders to the bayous, turning the isolation into a thing of the past. As the corporations moved in, along with recreational fishers and tourists, residents found themselves competing for natural resources and their lifestyle and culture as close-knit fishing communities were intruded upon (Solet 2006).

Following the 1973 Arab Oil Embargo, President Nixon initiated "Project Independence," which was intended to inspire dramatic increase in U.S. oil production, including new "frontier" regions for offshore oil (Freudenburg and Gramling 2011:115). Many people in coastal Louisiana were already employed by the oil industry and were therefore supportive of offshore drilling (Freudenburg and Gramling 2011:137). During the 1970s and 1980s, the corridor along the Mississippi River between Baton Rouge and New Orleans became known as "cancer alley" because of all the industrial plants and refineries and concerns increased over hazards to human health, generating the environmental regulatory movement (Kurtz 2014:369-70).

In the 1980s, along with President Reagan's deregulation of gasoline, new sources of crude oil in the North Sea and Alaska North Slope, and big increases in production by the Organization of Petroleum Exporting Countries, a worldwide surplus of oil and gas flooded the market and local production in Louisiana and prices of oil and gas dramatically decreased. Louisiana had a major economic depression. The energy industry had to lay off thousands of workers. Unemployment rates along coastal Louisiana increased from approximately five percent to over twenty percent (Freudenburg and Gramling 2011:143). During the second half of the 1980s, Louisiana had the highest unemployment rate in the U.S. (Kurtz 2014:407). Along with Louisiana's oil, petrochemical, and gas industries, the shipping and agricultural industries also endured acute downturns in production and profits (Kurtz 2014:422).

The state's reliance on a set resource production, in this case oil, and integration with global markets created a fixed economy, which hinders economic diversification and new job creation (McNeil 2011:69). The line between the oil industry and local communities in coastal Louisiana is much more grey than black and white. Many people in coastal Louisiana were either directly or indirectly employed by the oil industry themselves or had family members who worked for the industry. The oil and gas industry supported over 341,000 direct and indirect jobs in Louisiana (National Research Council 2006). Living in a place that was already experiencing resource extraction with the timber industry could have influenced people not to form a large-

scale protest against the arrival of the oil and gas industry. As the industry became further embedded in the landscape and economic diversification was limited, people came to depend on the industry for income, while also coming to realize the environmental, social, and economic impacts caused in large part by the industry.

Post-World War II Era

Besides the oil industry, the post-World War II era also brought power lines and electricity to the three tribal communities in the 1950s. This followed in line with President Franklin Roosevelt establishing the Rural Electrification Administration in 1935 under a program of unemployment relief (Rural Electrification Administration 1983). During World War II, a scarcity of materials caused construction of rural electric lines to stop. But post-World War II construction greatly increased as poles and wires became available (Northwest Power and Conservation Council 2008).

Until the 1950s, people from the three tribes mostly stayed within their own community, but also traveled by pirogue between the bayous at times to visit extended family. The increase in automobiles and roadways changed their mode of transportation and isolation. This was particularly true for Isle de Jean Charles, which became connected to the mainland when the Island Road was built in 1953.

While drinking a cup of coffee in their trailer on the Island, Regina, who had lived on the Island for forty-seven years since marrying Charles, a life-long Island resident, said how the Island Road was supposed to be built towards Montegut because it was higher ground, but the parish police juror, a member of the governing body of the parish, who made the decision where to build the road had a barroom in Pointe-au-Chien so wanted the road to go to his business. Many locals referred to the Island Road as a "political road." Henri, an Isle de Jean Charles

Tribal Council member, who had relocated to Grand Bois in the 1970s because he could no longer get to work with so much flooding on the Island Road, said that local politicians wanted business from people living on the Island and did not want people from Pointe-au-Chien to start going to businesses in Montegut, so that is why they decided to build the road where they did, even though the ground was not as high. Chief Albert explained that the road should have been built to go with the tide towards Montegut, but instead was built perpendicular to the tide towards Pointe-au-Chien because the Louisiana Department of Wildlife and Fisheries wanted to preserve the fish in the reservoir behind the road. The road has since been damaged from multiple hurricanes and been a point of heightened tension between the community and Terrebonne Parish Council, as discussed further in chapter seven.

The beginning of desegregation in the south also occurred during this time period. The Indians in Louisiana remained segregated in schools until the 1960s. In August 1963, a federal judge signed an order in New Orleans directing the school board to admit Indian children in the eleventh and twelfth grades to previously all white schools, with a plan for the desegregation of the remaining grades to be implemented by August 1964 (Houma Courier 1963). However, many Indians attending school at this time were negatively impacted by desegregation, being beaten up and called names when attending the same school as whites and blacks. As Theresa, from Pointe-au-Chien, wrote for her digital story,

I went to an all Indian school growing up. I still remember my first grade teacher because she's the one who taught me English. In 7th grade, after desegregation happened I became a different person because the whites would call me a "sabine," a derogatory word for Indian. I would end up in a fight and get suspended. I failed my first year at Oaklawn Jr. High and quit in 9th grade.

Residents also faced oppression because they spoke the French language that was forced upon their tribal ancestors during the 1700s. Everyone I encountered who was in their midforties or older spoke French as their first language, but most could not read or write it; they only learned to speak. However, they were punished if they spoke French in school. Jean, an elder from Isle de Jean Charles, explained about the teachers in the schools,

Every time they would hear us speaking a French word they would punish them and tried to force them to learn English and get the parents also to work with their children to learn English. And so now we're generations of people that should be able to speak French, that have a French name, but they cannot speak it because their family abandoned speaking French to them.

In the 1950s, many people left the southern parts of the bayous in Terrebonne and Lafourche Parishes as land developers and corporations settled in the area and took over the land. As one man described to me at a Grand Caillou/Dulac meeting, his grandpa left during the 1950s but always came back to visit what he described as his "Garden of Eden." During the two decades following World War II, relatively high national wages and a need for workers pulled young people out of Indian communities and into urban centers (Stanton 1979:103). Limited in employment options without being able to read or write, a number of Indians from Grand Caillou/Dulac went to work for the Harry Bourg Corporation, a land management corporation. As Jesse, from Grand Caillou/Dulac, described, "You'd be working for [Harry Bourg] and at the end of the year he'd give you so much. If you had property, he would take all that up and nothing you could do about it." Individuals and private companies could use the white-dominated court system to force individual Indians to sell or lease their lands, while lands held communally by Indians was not legally recognized by the government as legal title to the land and could therefore be taken by outsiders (Williams 1979a:200).

Also starting in the 1950s, the demand for shrimp surpassed the production levels of domestic shrimpers and shrimp imports began to rise in the U.S. market (Harrison 2012). With the continued growth in demand for shrimp, foreign producers explored other methods to harvest

shrimp. Aquaculture-based shrimp farming, funded by some of the same U.S.-based megaagribusinesses that pushed for large-scale, intensive agriculture, such as ConAgra, emerged as the new dominant form of shrimp production (Harrison 2012). As these processes emerged based on a neoliberal model of export-based production, local residents where the shrimp farms were located, predominantly in Asia and Latin America, were often displaced and faced loss of livelihoods and land rights (Stonich and Vandergeest 2011).

The Vietnam War impacted the tribal communities with some men from the communities fighting overseas, further decreasing the tribes' isolation. The war also changed the demographics of Louisiana, with many Vietnamese refugees migrating to Louisiana, especially around New Orleans and becoming a major presence in southeast Louisiana's fishing and shrimping industry. By this time, the Indians of southeast Louisiana had shifted economic activities from primarily trapping to also include more fishing, shell fishing, and shrimping (Campisi 2004:639).

Impetus for a changed tribal organization among Indians in Terrebonne and Lafourche Parishes came in 1963 when two tribal residents from the area attended the American Indian Conference in Chicago, resulting in the formation of the Houma Tribe, Inc. in the late 1960s, which directed its efforts towards education. Other tribal residents in the Grand Caillou and Dulac area formed a separate organization in 1974 called the Houma Alliance, Inc., which focused on improving economic conditions, creating educational opportunities, and undertaking land claims (Campisi 2004:639). In 1979, the two organizations came together and formed the United Houma Nation, Inc. (Campisi 2004:640). Tribal residents in Terrebonne and Lafourche Parishes had grown up without official tribal affiliation, but were called Indians by residents farther north and had the knowledge of their Indian heritage. However, the forming of the tribal

organizations in the 1970s started the current movement of the separate tribes officially forming and working towards federal recognition.

Federal Recognition

The Bureau of Indian Affairs established the formal federal recognition procedures in 1978. Federal recognition is more formally called "federal acknowledgment," but I refer to it throughout the dissertation as "federal recognition" because that is the phrase used by the leaders of the three tribes participating in this research. There are currently 566 federally recognized tribes in the U.S., most of whom never went through any formal evaluation process regarding their official status as tribes. For the most part, the U.S. government accepted tribes as federally recognized if they had engaged with the government through treaties, lawsuits, or policy enactments (Klopotek 2011). However, approximately one-quarter to one-half of Indigenous people in the U.S. and the U.S. occupied territories are not federally recognized (Barker 2011:28). Tribes whose land were grabbed during the early colonial era and did not enter into any formal relationship with the U.S. government, such as through treaties, were not automatically accepted.

Because federal recognition "has been as much a means of domination and subjugation as a means of protection for tribal sovereignty, its appeal to tribes has ebbed and flowed with shifts in federal Indian policy and race relations in the United States more generally" (Klopotek 2011:3). Tribal acknowledgment spread across the national scene during the civil rights struggles of the 1970s, which included increasing demands by Indigenous peoples for rights and resources (Miller 2004). Indian people began seeking federal recognition "both to claim an identity that they felt was rightfully theirs and also to enhance their potential for federal assistance in housing,

health care, education, and business development," as well as land claims, fishing rights, and

Indigenous rights to coal, oil, water, and other natural resources (Sider 1993:19).

Dependent on the Bureau of Indian Affairs (BIA) for funding and holding considerable

power within the BIA, reservation tribes of the National Congress of American Indians

supported the BIA to take control of the recognition process (Miller 2004:43). However, the

BIA's approach of applying a single model to all groups for recognition has resulted in inequities

(Miller 2004). The mandatory criteria for federal recognition include:

(a) The petitioner has been identified as an American Indian entity on a substantially continuous basis since 1900. (b) A predominant portion of the petitioning group comprises a distinct community and has existed as a community. (c) The petitioner has maintained political influence or authority over its members as an autonomous entity from historical times until the present. (d) A copy of the group's present governing document including its membership criteria. In the absence of a written document, the petitioner must provide a statement describing in full its membership criteria and current governing procedures. (e) The petitioner's membership consists of individuals who descend from a historical Indian tribe or from historical Indian tribes which combined and functioned as a single autonomous political entity. (f) The membership of the petitioning group is composed principally of persons who are not members of any acknowledged North American Indian tribe. However, under certain conditions a petitioning group may be acknowledged even if its membership is composed principally of persons whose names have appeared on rolls of, or who have been otherwise associated with, an acknowledged Indian tribe. The conditions are that the group must establish that it has functioned throughout history until the present as a separate and autonomous Indian tribal entity, that its members do not maintain a bilateral political relationship with the acknowledged tribe, and that its members have provided written confirmation of their membership in the petitioning group. (g) Neither the petitioner nor its members are the subject of congressional legislation that has expressly terminated or forbidden the Federal relationship (BIA 2013).⁶

Tribal members, scholars, and researchers have challenged distinct issues with the federal

recognition process, such as that the criteria have been applied inconsistently, the level of proof

required to meet individual criteria keeps increasing, and oral history is not accepted as evidence

(Klopotek 2011). Tribal existence is formed through a persistent extended family network based

⁶ The U.S. Department of the Interior, which oversees the BIA, is considering possible changes to these criteria.

around Indigenous ancestry and social identity as an Indian group. While most groups who have applied for federal recognition have met these criteria, those opposing their submissions have portrayed the groups as differing from the stereotypical image of western, reservation-based tribes (Klopotek 2011:38).

Not accepting oral traditions and requiring outside verification of people being identified over time as Indigenous created distinct disadvantages for many southern and eastern groups. There is minimal outside observation or scholarly documentation of these groups because the groups, faced with government allotment and forced removal, employed survival strategies of avoidance and hiding identity to remain invisible as Indian tribes (Miller 2004:58).

Federal recognition, which institutes a political and legal relationship between a tribe and the U.S. affirms the sovereignty of an Indigenous nation and helps protect the tribe's political, legal, and cultural rights, but also authenticates the U.S. colonial authority and control over the particular Indigenous nation (Klopotek 2011:2-3). Establishing the federal recognition process, Indigenous peoples "are only recognized as Native within the legal terms and social conditions of racialized discourses that serve the national interests of the United States in maintaining colonial and imperial relations with Native peoples" (Barker 2011:6). The federal recognition process requires a tribe petitioning for recognition to submit documentation on its genealogy, culture, and history to the BIA's Office of Federal Acknowledgment, making this office "the unelected arbiter of Indian identity in many ways" (Klopotek 2011:1). Obtaining federal recognition and obtaining resources for educational, economic, and health programs, tribes can be negatively
affected by the federal authority asserting control over a tribe's sovereignty and cultural integrity (Klopotek 2011:23).

Tribes not federally recognized are even further limited in their exercise of power because they have fewer available resources to counter the social inequities. In the federal recognition discourse, Indigenous cultural identity is considered authentic if recognition is received (Barker 2011:28), implying that Indigenous peoples and tribal groups that are not federally recognized are culturally inauthentic. In this context, written histories by outside authorities "take on the possibility of becoming transformed into reality" (Sider 1993:21), which is one of the biggest issues the three coastal Louisiana tribes that are the focus of this study face in doing archival research to provide written documentation of their tribal heritage.

When John Swanton, an anthropologist for the Bureau of American Ethnology, visited the region in the early 1900s, he explained that the people he designated as "Houmas" were incorporated with several other tribes, such as the Bayagoulas, Acolapissa, Biloxi, and Chitimacha, who were often brought in by European colonialists as slaves (Swanton 1911). The complex mixing of tribes is highlighted through Swanton's oldest informant, a tribal ancestor, Félicité Billiot: her grandmother, Nuyu'n was an Indigenous woman born in Mobile, Alabama and migrated to Bayou Lafourche and Terrebonne to escape British rule; her grandfather, Shulu Shumon, was a medal chief from Biloxi;⁷ and her mother was an Atakapa from Texas. She also accounted for Cherokee, Choctaw, and Alibamu marrying in with her people (Swanton 1911:292). Furthermore, Swanton referenced the original settler of Pointe-au-Chien as "old chief Alexandre Billiot, Chitimacha" (BIA 2008a). Jean, an elder from Isle de Jean Charles, explained how the tribes were so intermixed, "Grandpa always told us that we were Choctaw...And as we

⁷ The French system "of indirect rule involved the channeling of goods through an hierarchical system of 'medal chiefs'" (Galloway 2006b:295-6).

studied about the Choctaws, we discovered that we were a conglomeration of a people, mixed with Biloxi, Chitimacha, Choctaw."

Most information published about the tribes cites Swanton, who determined that the Indians called themselves "Houma." However, this was an extrapolation made by Swanton, as his field notes seemed to signal that only one informant made this claim (BIA 2008a). There is evidence that 'Houma' or 'ouma' was used as a Choctaw title or name and does not necessarily designate the person as coming from the historical Houma tribe (BIA 2008a). In fact, François, who had relocated about 140 miles northeast of Dulac, explained, "Houma in Choctaw means red. But I found out my mama's Choctaw, my grandfather and grandma too."

Sitting in Henri's trailer, approximately twenty miles northeast of Isle de Jean Charles, where he relocated to with his wife Josette, an Island native, Henri told me how in Swanton's original field notes,

[Swanton] said he went and interviewed Charles Billiot, which was Rosalie's grandson or great-grandson, on Pointe-au-Chien. He told he was chief of the Chitimachas. How many cows, the whole nine yards about the man's life. He went to the Island and met up with Alton Naquin, told him he was chief of the Choctaws. So you go further down in his notes of his interviews and he says I presume they're remnants of the Houma Indian. Our people knew who they were. How could he presume?

The BIA has thus far denied the three tribes federal recognition (BIA 2008a, 2008b), partially based on historical injustices, such as the tribes' ancestors being forced into isolation and not signing formal treaties with colonial settlers, which makes it difficult to prove the seven criteria required for recognition. Furthermore, with tribal ancestors migrating down the bayous during different time periods and coming from various tribes, it is difficult to trace ancestral lines back to identify fully with one historical tribe.

Land claims are extremely significant to the recognition process. For instance, the Tunica-Biloxi Tribe in Louisiana hired lawyers and proved they had a tract of land confirmed in a letter by Spanish Governor Estevan Miro in 1786; proof of the group's continuing tribalism relied on the group proving they held a communal land base (Miller 2004:197). The historical land grabs have made it even more challenging to obtain recognition because nearly all Indian lands were taken by colonialists, with many Indians in the southeast being forcibly removed or scattered and not necessarily staying together by tribal unit. Land claims have been one of the bigger issues for the three tribes in going through the recognition process. For example, Pointe-au-Chien issued a land claim over twenty years ago against Louisiana Land and Exploration Company for taking tribal lands, but without federal recognition, it is much harder for the tribe to regain the land. Chuckie, the Chairman of Pointe-au-Chien, explained that when the tribe started working towards federal recognition, the goal was to get their land back. He said, "I'd like to get the land back, even if underwater if we find oil could help tribe out. People might still be able to scratch a living out of it."

It is not only about gaining land taken by oil corporations, but also land now owned by the government that was once the tribe's land. For example, where Pointe-au-Chien's ancestral cemetery is, a couple of miles south from the community's current location, the tribe is trying to regain ownership of the land that is now owned by the Louisiana Department of Wildlife and Fisheries; if the tribe obtains federal recognition it could help with their land claim. One possible avenue for proving land claims is by tracing land holdings back to what the Spanish gave to the tribes. However, these records, if obtained, are in old Spanish and difficult to have translated. Without financial resources to obtain and translate such records, it is nearly impossible to prove land claims and other criteria necessary to obtain recognition. Furthermore, with the Louisiana territory changing hands to different colonial rulers and with Indigenous peoples being displaced, the tribes and individuals remaining in the southeast often were forgotten and not written about

or recorded. The French colonialists who took over after the Spanish did not recognize the Indigenous groups' land claims, which continued to go unrecognized when the U.S. took over control of Louisiana. Federal recognition also plays a role in the tribes' ability to cope with disasters together as a unit. If the tribes receive recognition, Chairman Chuckie saw one benefit being they could have access to resources to try to obtain property and people could have a place to go together when storms come. As he said, "without federal recognition, hard to get funding. During or right after storm, organizations might contribute, but other than that seldom happens. With federal recognition would have bigger voice, especially during disaster times. Even with BP deal, would've had bigger voice and say so about what's happening if federally recognized," referring to the claims process following the 2010 BP Deepwater Horizon Oil Disaster.

Doing research for the tribes' federal recognition process, I began to more deeply understand the challenges they faced. I started off at a research center in New Orleans. I told the man working there that I was trying to find French and Indian trading records. He chuckled and told me those would be nearly impossible to find. I tried to follow a paper trail from the library in Houma to research centers in New Orleans to the State Archives in Baton Rouge to the National Archives, the Library of Congress, and the Anthropological Archives in Washington, D.C. When I went to the National Archives, I told the man working there that I was looking for information on the Biloxi tribe. He also chuckled, telling me there were only records for the federally recognized tribes and predominantly the Five Civilized Tribes, referring to the Cherokee, Choctaw, Chickasaw, Creek, and Seminole nations.

I spent days figuring out how to navigate the archive systems, reading microfilm at the Library of Congress, and searching through boxes at the National Archives and Anthropological Archives, getting no further than when I started. I was amazed that the tribal leaders and councils

had been able to persist at their effort for over twenty years. For some of the younger tribal members who helped with research efforts, the struggle for federal recognition had been going on most of their lives.

One issue the tribes had in the research process was being interrupted by disasters. For example, Paulette, who had relocated about fifteen miles north of Pointe-au-Chien to Bourg, explained that several Pointe-au-Chien tribal members were looking for how integration occurred in the school system and discussion around segregation to show that "this school system, here in Terrebonne and Lafourche called us Indians, we're Indians they knew us as Indians." However, since they started on this particular research path, "We still haven't finished going through the school board minutes and since then we've had two storms." The tribes' recognition submission to the BIA has been on hold since a state of emergency was declared during Hurricanes Gustav and Ike in 2008.

Another major issue the tribes had in the recognition process was proving a cohesive community before 1830. The tribal ancestors migrated throughout the lower Mississippi Valley and, as several residents pointed out, their elders could not read or write, so how were they supposed to keep a written record of their history? The BIA was asking for written documentation that did not exist. The tribes audio recorded oral histories and transcribed these records, but the BIA had thus far not counted the oral history tradition as evidential proof, placing the western mode of research and documentation above traditional methods of passing along history and knowledge. And many elders had become weary of retelling their story over and over, with nothing coming to pass. Furthermore, tribal members growing up before the 1990s did not have tribal affiliation; they just knew they were Indian. People talked about their

elders telling them they were Choctaw or Chitimacha, but for the most part they were just raised as Indian, without any specific affiliation.

Members of Isle de Jean Charles voiced their frustration at a tribal meeting in 2012, discussing how the recognition process was designed to separate tribes and breakup tribal identity, explaining that federal recognition is another name for cultural genocide. Without recognition, the tribes did not have sovereignty as an Indian tribe, which is more than about legal and political rights, but is an affirmation of who they are as a people (Rising Voices 2013).

While cooking gumbo with Chief Shirell of the Grand Caillou/Dulac Tribe, who had relocated about fifteen miles northeast to Chauvin, Marlene, a Grand Caillou/Dulac tribal leader who had relocated about twenty miles northeast to Bourg, explained to me that while she understood federal recognition might not bring anything better, at least they would have their identity. Some tribal members felt that without recognition, a sense of their identity was being denied. For example, François showed me some headbands he had made with fake feathers. Because he was not part of a federally recognized tribe, it was illegal for him to obtain eagle feathers, and he could not dance the eagle dance at powwows. Federally recognized tribal members can use real eagle feathers for cultural or religious purposes. Some of the main issues the tribal leaders and councils were working towards with recognition included more access to higher education, health care, and programs to support the elderly.

With loss of land and livelihoods and more people being forced to relocate, it became more difficult to prove community and obtain federal recognition. Henri, an Isle de Jean Charles Tribal Council member, asked at the public hearing in Houma for Louisiana's draft 50-year Master Plan for a Sustainable Coast, which outlines the coastal restoration projects that would be undertaken, but mostly left out the three tribal communities, "Where in your report is your plan

to relocate our tribe? We're running out of chances for federal recognition...What's the plan to keep our community together? Oil companies came in and left us like dust. Now you want to scatter us like dust."

In total, there were currently four federally recognized tribes and ten state-recognized tribes in Louisiana (National Council of State Legislatures 2014). For example, the Chitimacha tribe of Charenton, Louisiana, who shares many of the same familial names as people from the three tribal communities and believed to be related, is a federally recognized tribe, and a Choctaw group in Jena, Louisiana was acknowledged as an Indian tribe in 1995 (BIA 2008a; Klopotek 2011). The Tunica-Biloxi in Marksville, Louisiana, another federally recognized tribe, is also thought to share familial connections as well. Conflict was exacerbated between tribes through the recognition process. Isle de Jean Charles, Grand Caillou/Dulac, and Pointe-au-Chien were referred to the United Houma Nation and state and parish agency representatives as "split off" groups, not viewing them equally as other Louisiana tribes. The recognition process even causes tension within some families, as some family members have switched tribal affiliations. And some tribal leaders were also concerned that tribal members could become frustrated if the tribes received federal recognition but did not see benefits right away.

In 1994, after the United Houma Nation applied for federal recognition, the BIA told them that they did not have enough proof to demonstrate they were Houma Indians. The BIA representatives said that the people were Indians and they should look into the Choctaw, Chitimacha, Biloxi, and Acolapissa lineages. A BIA representative I spoke with, who was first assigned to the case over twenty years ago, explained that the BIA did find that people from the three settlements were Indian, but now they just had to find them a tribe with which to identify.

The BIA recommended that other tribes had success in receiving federal recognition by forming smaller groups to support the governance and community criteria. Pointe-au-Chien separated from the United Houma Nation and, despite having common ancestral lineage to the Biloxi-Chitimacha Confederation of Muskogee (BCCM) tribes, decided to not be part of the BCCM. The three tribes – Isle de Jean Charles, Grand Caillou/Dulac, and Bayou Lafourche – formed as individual tribes based on their settlements and common ancestry. The three tribes came together under the BCCM confederation, which they formed because the BIA told them that this would improve their chances of obtaining federal recognition. While the United Houma Nation stuck to their genealogy as Houmas, the four other tribes have spent the last twenty years working with genealogists, archaeologists, and researchers to re-do their genealogy. The tribes re-applied for federal recognition and were once again denied in 2008 (BIA 2008a, 2008b).

In June 2004, the three tribes, along with the BCCM Band of Bayou Lafourche and the United Houma Nation, were officially re-recognized as Indian tribes by the state of Louisiana (Dupre 2004). Louisiana uses a legislative recognition process where state recognition is received by the passage of concurrent resolutions by the Louisiana Senate and House of Representatives (Koenig and Stein 2008:122) State recognition establishes a government-to-government relationship and secures tribes' rights to participate in some federal programs, but rights granted through state recognized as sovereign nations in Louisiana and do not have state Indian reservations. Tribal members repeatedly conveyed how state recognition provided very little and that they did not have the same rights and access to land, education, and health services as federally recognized tribes. When the BIA or other government agencies announced

opportunities for grants or programs, tribes almost always had to be federally recognized to qualify to participate.

Accumulating Disasters in an Era of Climate Change

Chief Shirell and I drove down the bayou to Shrimper's Row. She told me how the area

had been perfect growing up; they were so happy as Indians on the bayou. And now, she pointed to the trees, saying how the trees were dying, just like on the Island. She took me to the site the Grand Caillou/Dulac Tribal Council had picked for the Grand Caillou/Dulac community center, for which they were seeking funding to build. We stopped where her family lived until Hurricane Andrew hit in 1992 when she was twelve years old. She had not stepped foot on the property since. Chief Shirell said that they used to play a mile back behind the house in the woods. Now, there was a sparse layer



Figure 13. Chief Shirell at Home. Source: Julie Koppel Maldonado, 2012.

of trees in front of us, with water directly behind. We walked through the overgrown weeds and shrubs on what had been her family's driveway.

She gazed out into the woods and walked a few feet to touch the trunk of an oak tree close to the road. A huge smile swept across her face as she looked up and saw the rope her family had hung from a branch to swing on so many years ago still attached to the tree. She stood next to the tree, and as she gazed out towards the water, tears started slowly rolling down her cheek. She said how they did not think we are worth saving. I asked who "they" was and she referred to the government and corporations.

We made another loop and crossed Bobtown Bridge onto Shrimper's Row. She said over and over, "home." We drove further down and she pointed out where people from her tribe had once lived. We drove past an open gate with a sign "Southern Comfort," a subdivision with camps owned by people from outside the area for recreational fishing (Solet 2006). We passed road names like Bud Light Court and Champagne Drive, alluding to the place being for tourists and recreation users coming to get away. With the vast expansion of fishing camps throughout Terrebonne and Lafourche parishes, the wetlands have been further degraded with inlets cut for navigation of recreational boats (Solet 2006). Approximately twenty-four gated or fenced-off neighborhoods of fishing camps were constructed in southern Terrebonne, Lafourche, and Jefferson Parishes from the late 1980s to mid 2000s, indundating the close-knit fishing communities with "weekend warriors," mostly Anglo-Americans from the greater New Orleans area (Solet 2006). Along with the land loss and saltwater intrusion, the rapid development of the coast further threatened residents'

livelihoods.

Trailers and small houses disappeared behind us, as we now passed elevated vacation houses. Chief Shirell pointed in all directions where there had been significant land loss and said how her community was being hit at every end. The number of hurricanes over the last



Figure 14. Example of Rural Gentrification in Dulac. Source: Julie Koppel Maldonado, 2011.

fifty years, and flooding that came with them, was rapidly accumulating. For example, the communities had been affected by Hurricane Audrey in 1957, Hurricane Hilda in 1964,

Hurricane Betsy in 1965, Hurricane Carmen in 1974, Hurricane Juan in 1985, Hurricane Andrew in 1992, Hurricane Lili in 2002, Tropical Storm Bill in 2003, Hurricanes Katrina and Rita in 2005, Hurricanes Gustav and Ike in 2008, Tropical Storm Lee in 2011, and Hurricane Isaac in 2012.

On top of this exploited foundation, climate change-induced sea level rise and intensified hurricanes compounded the effects of subsidence and erosion (Burkett and Davidson 2012; Williams et al. 1992). Southeast coastal Louisiana has experienced one of the world's highest rates of relative sea level rise – sediment subsidence combined with sea level rise – with an over eight-inch rise in the last fifty years, slightly faster than twice the global rate (Karl et al. 2009; Melillo et al. 2014; NOAA 2012). According to a National Oceanic and Atmospheric Administration (NOAA) report, the area was predicted to face the highest rate of relative sea level rise worldwide, with an additional 4.3 feet of water rising by the end of this century (Marshall 2013). Relative sea level rise had far exceeded sediment accretion throughout the Gulf Coast, with the greatest land loss impact occurring in the Deltaic Plain (CLEAR 2006).

According to the Third U.S. National Climate Assessment, "Global climate is changing and this is apparent across the United States in a wide range of observations. The global warming of the past 50 years is primarily due to human activities, predominantly the burning of fossil fuels" (Melillo et al. 2014:15). The southeast region is particularly vulnerable to sea level rise, hurricanes, extreme heat events, and decreased water availability (Carter et al. 2014:397). The average annual temperature across the southeast region over the last century fluctuated between warm and cool periods, with an increasing number of hot days and decreasing number of extremely cold days since 1970, with temperatures expected to increase during this century (Carter et al. 2014:398-9). There is also a severe threat of increased flooding during heavy rain events in low-lying coastal areas of the southeast (Carter et al. 2014:401). Sea surface temperatures are expected to continue to rise faster over the coming decades, which means the risk of more intense hurricanes (Walsh et al. 2014).

During a workshop held in January 2012, tribal members from the three tribes and Grand Bayou, another coastal Louisiana tribal community had lengthy group discussions about what climate, weather, and other environmental changes meant for the communities. Tribal members discussed how they experienced the impacts of a warmer climate; many agreed that it stayed warmer longer and winters were shorter than before. The hotter temperatures prevented the plants and trees from entering their customary dormant season that was needed for good production and plant health. Their social interactions and sense of community were also impacted, with people staying inside more with air conditioning and keeping windows shut. The hotter temperatures had also impacted their livelihoods, with shrimpers either needing a cooling system or having to come in sooner because of refrigeration concerns in the heat and not being able to stay out for multiple days (Coastal Louisiana Tribal Communities 2012).

Based on the workshop's discussions, I created a technical input report with the tribal leaders to submit to the U.S. National Climate Assessment. Going through this process with them provoked my thinking more carefully about the way researchers interact with communities regarding climate change and how climate change is contextualized within experiences of broader environmental change.

During a story circle at Pierre's house on Isle de Jean Charles, Pierre and Louis, who had relocated from Isle de Jean Charles to Houma, discussed experiencing hotter temperatures than before,

Pierre: It was colder then than today. Louis: Oh yeah, used to have snow and freezing. Pierre: Three or four days iced up.Louis: Even the weather changed for down here!Pierre: We getting close to the Gulf, that's why. When you get closer to the water, the cold don't go as far.

While scientific evidence explains the increased temperatures due to human-induced climate change and many locals agreed that it stayed warmer longer, it is important to pay explicit attention to the reasons people were giving for these experiences, such as the loss of land causing the Gulf water to creep in, as in the example above. If I had only been listening for the story circle participants to discuss how the environmental changes related to climate change, I would have missed what they talked about just a moment later:

Louis: Once they started digging all them canals and all that, that's when the saltwater started coming in. That's when we started losing all of the ground, all of our trees and everything. That was all through the oil companies.

Needing to carefully listen was further pronounced to me a year after the workshop when I sat next to Chief Albert during the National Climate Assessment's southeast regional town hall meeting. Chief Albert commented to a panelist who talked about recent saltwater intrusion in the southeast that where he was born in South Louisiana, local residents had been experiencing saltwater intrusion for forty-five, fifty years because pipeline canals were dug, which allowed saltwater from the Gulf of Mexico to come in. Scientists talked about these issues as caused by climate change in a vacuum, failing to communicate climate change as part of the environmental changes Chief Albert had witnessed most of his life, missing the opportunity to bring local people's knowledge into the conversation on equal footing with western scientific knowledge.

Some tribal members felt that climate change was being used as another excuse to conduct studies and make money off the area. They had to see and experience the impacts and what they were seeing was pipelines, canals, and land loss. However, some tribal members had started making sense of climate change as they related to the world. For example, when I asked Chief Shirell if her community was experiencing sea level rise or more intense hurricanes she said.

Oh yeah, global warming and with global warming, rising sea levels. We have El Niño and La Niña in the Gulf. Have seen those effects...higher activity of hurricanes and stronger and damage goes further...that's all newer stuff coming out and it's because of climate change. Mother Earth is mad, she's angry. Look at what we're doing to her. We're polluting her air, damaging her grounds, polluting her waters, how do you want her to fix the problems when you're doing so much she can't keep up. Of course we're seeing the effects. Hotter temperatures. Springtime used to be spring, we weren't sweating in the spring.

Many residents felt the effects of a changing climate, but with so many co-occurring disasters and changes, it was often difficult to isolate any one event or disaster from another.

The Disaster Continues to Unfold

Pierre and Marie gave me a bowl of ice cream as we sat at their kitchen table and watched the tracking of Hurricane Isaac on the television. Pierre said some numbers out loud that he saw on the screen. He went in the other room and came back with a map of the Gulf of Mexico, Caribbean, and Central American region someone drew in 1987 and he had used it to track the storms ever since. He looked at the latitude and longitude numbers being shown on television and marked an "x" on the map, the latest in a line of "x's" he had marked since the day before. The couple had never evacuated for a storm until recent years. Marie did not want to leave, but Maurice, their son, was insisting they had to evacuate and stay with him and his wife in Houma.

Across the street at Renée's, her grand- and great-grandchildren played under the house. Her daughter asked me how it was crabbing last week with Pascal from Pointe-au-Chien, signaling they knew everything that goes on in the area. I went up the stairs and in the house to see Renée. Children and grandchildren wandered in, occasionally taking a bowl and filling it with spaghetti and *roux* sauce, the basis for much of Louisiana cuisine, from the stove. Renée said she would probably evacuate to her son's in Grey, about thirty-five miles northwest of the Island, but was not too eager to leave.

I drove down the road to see Chris. He had secured his dad's guitars with bungee cord up on a shelf just in case of flooding. I remembered what we talked about for his digital story,

When I was their age, we had trees that blocked the west sun, so we could sit out on the porch and enjoy a long afternoon in the shade and it was comfortable. My dad played guitar and sang. He taught me how to play. We would spend the afternoon talking mostly in French and others would come by and join us. For the kids now there is some French, but more English, and the trees we once sat under are gone.

I drove back across the Island Road and stopped at the palmetto hut people from Pointeau-Chien had built just like their ancestors did. Chairman Chuckie and his parents were there loading up scrap wood into his truck. He wanted to put webbing on the hut to protect it but there was not enough time; he had been called back to go back to work the next day on the tugboat. I arrived back at our camp to feast on a tray of boiled crabs and shrimp a neighbor left for us. That evening, my husband Phil and I walked down to the marina at the end of Pointe-au-Chien. Lee, from Pointe-au-Chien, was there with his son, pulling up the shrimp land net, full of small crabs and sardines, but hardly any shrimp.

As the red glow of the sun peaked through our window the next morning, I got on my bike and headed up the bayou to go across the bridge over Bayou Pointe-au-Chien and back down Oak Pointe Road. As I biked down the other side of the bayou, the morning air was still amidst the quiet bustle of people loading boats up on trucks to transport them to higher areas nearby in Montegut or Klondyke, about fifteen miles northwest of Pointe-au-Chien. Small boats traveled down the bayou to collect the wiry red, green, and yellow crab traps, which soon started piling up along the sides of the bayou. Oyster sacks were loaded into trucks. Docks were emptied. The sides of the slightly elevated bridge just past the Island Road started filling up with four wheelers and trucks.

I drove over to the Island and saw Rebecca and Erin sitting in front of their camper. As I got out, Rebecca started to cry. After losing her house to Hurricane Gustav in 2008, she was worried about it happening again. A few houses down, car

trunks were open, filled with duffel bags and backpacks. Further down the Island,



Figure 15. House Elevated Above the Floodwaters from Hurricane Isaac, Isle de Jean Charles. Source: Julie Koppel Maldonado, 2012.

Renée's children and grandchildren were packing up under the house. Further down the road, I stopped to talk to Victor, who had driven over early that morning from Mississippi to get some things just in case. He was leaving in a few minutes to go back to his house in Mississippi, which was on the path to get hit by the storm. I picked up Chris and his great-niece and great-nephew and we all piled, along with their two dogs, in the car. As we drove back up the Island, his niece, Rebecca's granddaughter, started shouting she wanted to get out of the car. She grabbed my camera and I pulled over. The campers in front had been moved and I saw the remains of their house that was destroyed by Hurricane Gustav. She started taking pictures of the camper and the remnants of the house. Chris said he decided to leave because of the possible tornado activity. With nothing to protect them anymore, that was what scared him. But he was planning to come back right away. He joked a lot, but grew more quiet and serious as we drove into Houma and I dropped them off at his other sister's house.

Back at our camp, Phil and I packed up the car and drove thirty miles northwest to a friend's house. As we drove away, I yelled across the bayou to Liz, from Pointe-au-Chien. She was on the dock in her Cajun reeboks, shouting out, "hurricane party!"

When I returned nearly three and a half months later, I saw the continued impacts of the hurricane. Rebecca and her two grandchildren were still living with Chris while their camper got fixed. I spent a day with another tribal community a couple hours to the east. Many of the residents had only been able to return just a few days prior. Some had missed a full shrimping season, with their boats busted from the storm. Piles of trash were still lined up behind the houses from all the mud and debris. One resident told me about Manila Village, a settlement started by Filipino immigrants that used to be located farther south, but was no longer there; it was destroyed during Hurricane Betsy in 1965 (Arceneaux 2013). She said how it had been a thriving community, a common word that people used to describe the tribal communities down the bayous.

Conclusion

The second half of the twentieth century and first part of the twenty-first century continued the legacy of atrocities experienced by the tribes for centuries, from their ancestors' displacement and forced removal in the 1700s and 1800s, to the marginalization faced in their region of refuge. As the twentieth century unfolded, the control of oil resources emerged as the primary signification of power. The growing relationship between the government and oil industry during this time period led to increased vulnerabilities of coastal Louisiana's communities and set the stage for new disasters to unfold.

CHAPTER 4

COREXIT TO FORGET IT: EXPERIENCES OF LIVING IN AN ENERGY SACRIFICE ZONE

The most important thing to me is trying to get the parishes to save what is left of our land, the land they want to see wash away so the oil companies can take over. —Theresa, Pointe-au-Chien Indian Tribe, excerpt from digital story, 2012.

Building off the history of natural resource extraction in coastal Louisiana, this chapter discusses the ways the oil industry altered the landscape through oil rigs and dredged canals for drilling barges and pipelines, as well as through the acquisition of lands for oil exploration and development, a process which perpetuated human control over the environment. To understand how environmental degradation intersected with social inequalities and economic, social, and political power structures, this chapter shows how structural violence played out in residents' lives through an oil-based economy fueled by government-corporate oil partnerships, disasters, accumulation by dispossession, and the creation and perpetuation of an energy sacrifice zone. It highlights the 2010 BP Deepwater Horizon Oil Disaster, including the broader issue of safety regulations and the politically mismanaged cleanup process that used toxic Corexit dispersant to disperse the oil in the water, further contaminating the environment and affecting people's health and livelihoods. One of the challenges the tribes' faced related to the spread of the oil industry throughout the region was the struggle over land rights and determination of who was given access to the lands and waters.

<u>A Conflicting Relationship: Ownership of</u> Land, Water, and Resources

The notion of land ownership was a concept first denoted in the Inter Cetera papal bull of 1493, which granted to Spain "the right to conquer the lands which Columbus had already found,

as well as any lands which Spain might 'discover' in the future" (Newcomb 1992). Land ownership was further perpetuated by European colonialists taking ownership over tribal lands in North America from the sixteenth to nineteenth centuries and England's enclosure movement in the eighteenth century, which converted communal rights of land into private ownership (Kain et al. 2011). This concept has since fueled the separation between humans and the environment, colonialists and Indigenous peoples (Rising Voices 2013).

The dualistic perspective of humans and the environment continued to dominate economic structures, policy-decisions, and public discourse. Such discourses contrast the commons approach, which "includes humans as active participants in the environment" (McNeil 2011:121). The commons is defined as "those assemblages and ensembles of resources which human beings hold in common or in trust to use on behalf of themselves, other living human beings and past and future generations of human beings, and which are essential to their biological, cultural, and social reproduction" (Nonini 2007:1). A major flaw with private ownership of the commons is that for resources to not be exploited, "users must be interested in the sustainability of the particular resource so that expected joint benefits will outweigh current costs" (Ostrom et al. 1999:281). The tribes claimed ownership of property before the oil corporations and developers arrived and land was traded among the tribes' ancestors in the area (Westerman 2002), but land and water use was also managed as open-access. A conflict occurs when the extraction of a resource for some people's benefit, such as oil extraction, causes the deterioration and loss of resources for other people's benefit, such as loss of land and fishing resources.

Authorities controlling the natural resources, such as the state leasing waters and mineral rights to oil and gas corporations, effected many residents' subsistence-based livelihoods. As

Frances, from Pointe-au-Chien, described while we sat talking in her raised house along Oak Pointe Road, "When we were growing up...if you wanted oysters in the wintertime...just get in the boat and go get some oysters. You can't do that now. If you don't have an oyster lease you can't go out there." Act 106 of 1886 authorized the leasing of water-bottoms to individuals or corporations to harvest oysters and protect their reefs (Louisiana Department of Wildlife and Fisheries 1988). However, many residents I spoke with who harvested oysters talked about needing a lease as a more recent phenomenon, which I related to the communities being isolated and mostly ignored by state officials into the 1900s. Now, residents had to lease waters for oyster beds from the oil corporations, major land developers, and the Louisiana Department of Wildlife and Fisheries.

Frances also pointed out that whereas before there was a season for oystering, now it was done year-round, especially by the big fishing industry, which depleted the oyster population. Henri, whose family originated from Isle de Jean Charles, but had relocated to Grand Bois, talked about the difference in oystering by season as well, discussing the way that local fishers worked to sustain a common resource and how state regulations were now interfering with local traditions of conservation.

I remember when my daddy, he fished oysters during the wetter months, then during the summer they'd go trawling. Now August they cut poles, cut the willow trees for marking their oysterbeds. September they'd start oystering, they'd bed October-March. Then they'd stop. Get ready to go trawling. When they went out there, the shrimp was too small. They'd come back in. Wait a couple weeks and go back, the shrimp was nice. They knew how to conserve for themselves. They knew how to work it. But now, the all mighty dollar. And before Wildlife and Fishery and all kind of regulations and stuff, the people didn't have all of that.

As New Orleans expanded in the 1800s, the commercial oyster industry developed for local consumption and exportation, with demand quickly exceeding the supply, leading to the industry continuing to expand and over-use the oyster reefs. In 1870, because of the rapid

depletion of oyster reefs in coastal Louisiana, the state passed Act 18, which closed the oyster season from April 1st to September 15th; this was amended in 1871 with Act 91, which reduced the oyster season closure from May 1st to September 15th (Louisiana Department of Wildlife and Fisheries 1988). It is difficult to say however if these regulations previously impacted the oystering practices of the three tribes because during that time they were still geographically and socially isolated and mostly ignored by state officials, including the Louisiana Department of Wildlife and Fisheries' regulators. Part of the changes in the tribal residents' oyster harvesting and other fishing practices were influenced by their forced assimilation into the global marketplace and state regulations put in place because of the unsustainable fishing practices of the large-scale commercial fishers.

There is an inherent conflict of interest when different actors who do not share a common vision of the resources use the waters and lands surrounding the communities. For example, as the Chairman and Chief Executive Officer of the Apache Corporation,⁸ which owns land around the communities and is one of the world's biggest oil and gas exploration and production companies, stated, "Since its inception in 1954, Apache has been driven by a relentless pursuit of opportunity to profitably grow an independent oil and gas company for the long-term benefit of our shareholders" (Apache Corporation 2010:4). Apache produces oil and natural gas on five continents and anyone can buy shares of Apache stock (Apache 2014b), thus the shareholders are located all over the globe and removed from the local landscape and continued sustainability of the lands, waters, and resources.

Talking about local environmental degradation, residents often pointed to corporate greed, power, and lack of political will as the root problems. As Celine, from Grand

⁸ The Apache Corporation's name does not have any connection to the Apache tribe. The corporation's name comes from the founders' initials with "che" added at the end (Apache Corporation 2014a).

Caillou/Dulac, said, while we sat on a dock together along the Houma Navigation Canal, "They want to put all them oil things and you know, all because of money. Money, money, money. That's what it all boils down to." And as Chief Shirell noted, during a conversation in her living room in Chauvin, approximately fifteen miles northeast of Dulac, "They should've replaced the barrier islands a long time ago...Now, I can't say that they can't do it...They don't want to do it. So instead, they would rather sacrifice communities and say well, you know we did what we could do." The idea of being sacrificed was repeated several times by others, such as when I asked Gabrielle, who relocated from Isle de Jean Charles to Houma, what she thought about the land loss, she said how "it's just going to be sacrificed. It always makes you figure you're just being sacrificed for bigger benefits."

Local residents felt that their lands and communities were being sacrificed while others benefited. Such a scheme, in which the oil industry and the government have had a long-standing partnership, has turned coastal Louisiana into an energy sacrifice zone (Maldonado 2014a).

Land Grabbing in an Energy Sacrifice Zone

The government doesn't do anything to save our land and neither do the oil companies who are responsible for digging the damaging canals many years ago. These companies reap the rewards while we are left to sink into the Gulf of Mexico. They didn't rape Mother Earth; they have destroyed her and my people and our heritage with their lack of morality and common sense. – Chief Shirell, Grand Caillou/Dulac Band of Biloxi-Chitimacha-Choctaw Indians, excerpt from digital story, 2012.

A sacrifice zone is "a place where human lives are valued less than the natural resources that can be extracted from the region" (Buckley and Allen 2011:171). The protection of oil interests, along with the drive for industrialization and economic gain, transformed coastal Louisiana from a region of refuge into an energy sacrifice zone (Colten 2012). Neoliberal policies, emphasizing free trade and privatization, currently guide our economic and political system and encourage the creation of a sacrifice zone (Harvey 2005; McNeil 2011), producing

and re-producing institutionalized social inequality (Briggs and Mantini-Briggs 2003:253, 330). Examples of such policies discussed in this dissertation include state-claims of mineral rights and submerged land, exemption of the oil and gas industry from major provisions in environmental laws, the promotion of export-based shrimp production into the U.S., and the policies promoting offshore oil drilling in the Outer Continental Shelf. Thus, places such as coastal Louisiana have become "the new geographies of domination" (Reid and Taylor 2010:11), within which increasingly vulnerable populations become further marginalized. As Theresa wrote for her digital story, "Our ancestors went to the end of the bayous to save their lives so that they wouldn't be killed by the white man and now we suffer for it."

Feelings of being sacrificed were highlighted through the loss of basic public services. For example, the gas company servicing Isle de Jean Charles told residents that it was not worth it to repair the gas line on Isle de Jean Charles, so instead switched people to butane. While the residents were given a substitution, the issue was the underlying message being conveyed in not repairing the line and feelings that the government wanted to force people out. As Pierre and Louis discussed during a story circle at Pierre and Marie's house on Isle de Jean Charles,

Pierre: [United Gas representative] said it don't pay to put a new line because it cost too much...

- Louis: For the people we've got they don't want to shuck out the money or rebuild to where our people could come back. That's why our people don't want to come back because they don't want to come back and be in water.
- Pierre: That's right.
- Louis: Because I'm not going to come back here if I'm going to have a house and then the next thing you know Pierre: You're gone.

By not repairing the gas line, the message received was that the Island community was not worth investing in. There was a sense of being devalued and sacrificed in the name of economic gain for oil production and state interests. As Gabrielle expressed when I asked her what she thought about when she went to the Island to visit family, "There's no protection at all. There's no new growth, nothing. Nothing to try and fix the problem. So it's just going to be sacrificed. It always makes you figure you're just being sacrificed for bigger benefits."

Residents of the three tribal communities told me how representatives from the oil companies coerced people into signing agreements to lease or sell their land for drilling. However, the local residents could not read or understand the forms, as most of them did not speak or read English. Taking advantage of people's illiteracy, some operators told people they were only signing lease agreements when they were really selling their land (Austin 2006:677). Chairman Chuckie, a tugboat captain, explained that because people could not read the forms they were given, they would "just put a cross. So someone wants to forge a cross, they can. Was told someone signed a form after he was dead for his property." Similarly, during a Grand Caillou/Dulac tribal meeting at a nearby fire station, the few tribal members in attendance discussed how people from their community were pushed out in the 1950s when oil companies and developers settled in the area, as discussed in chapter three.

During a Pointe-au-Chien story circle at her house, Marianne, an elder from Pointe-au-Chien, talked about people getting their land taken because they could not read what they were signing, which Theresa followed by saying, "We understand why our people got killed because they were too trusting. The Indian people from way back when the Europeans first came. They ended up wanting to kill all the Indians so they could have all the land. They were too trusting, just like us. I guess it's in our blood."

Jack, an elder Cajun from upper Pointe-aux-Chenes, confirmed what the tribal members said, pointing out the threats of violence that came with the land grabbing, "The oil companies just went out there and took what they wanted. And if anybody would've tackled it, they had

people with pistols on their side...make a round of it." This happened all over coastal Louisiana. For example, Victor described to me how his family in Lafitte, about ninety miles northeast of Isle de Jean Charles by road, had their property taken by the Louisiana Land and Exploration Company.

Where the residents used to trap, every year the companies would come and survey to mark off their territory. Chief Albert explained, as we drove around the Island, "And every year the sign would be closer and closer until it was in our backyard. At that time it was La Terre, which was a land company. Then they sold to Louisiana Land...I think now it belongs to Apache, Apache Corporation...Every year or two years they would get closer and closer until finally we had them on our fence posts."

Some residents strategized ways to maintain their lands. For example, talking over a cup of coffee at his house, Antoine told me about how some guys from Louisiana Land and Exploration came to cut through Pointe-au-Chien's burial ground, but some of the residents chased the guys off with shotguns because. But Louisiana Land and Exploration still claimed other community property,

[Louisiana Land] just made a claim on it...And that's what the company took where [the residents] were making their living off, at that time they were just trappers. And then the company, that's when they came and took all their land and the only thing you could is lease. They had to lease their own land. And then after years and years they claim it's the land of the company.

I asked Antoine why he was fighting so hard to get the land back. He replied, "just to get it back. To get it back." While oil companies continued to take over the waters, some family members, like Nicholas and Robert from Pointe-au-Chien, got together to lease some of the waters so their people could continue to access the water for fishing. While the transformation into a sacrifice zone and land grabbing are seen most distinctly in Louisiana through the oil industry, these companies were not the first entities to claim land or extract resources. Since Spanish and French colonialists arrived, Louisiana's coastal wetlands have been "perceived both as wastelands and as systems capable of endless regeneration and renewal" (Austin 2006:674). For example, in the late 1800s, after Congress expanded opportunities for the transfer of public lands, large tracts of cypress swamplands were bought by private lumber companies, placing the cypress directly into the economic marketplace and leading to large-scale and rapid deforestation (Austin 2006; Viosca Jr. 1928).

After land and oil developers settled in the area, instead of property being passed down from one generation to the next, residents needed official papers and documents to property ownership. While tribal ancestors were involved in official land trades with legal documentation since the late 1700s (Westerman 2002), many families still practiced more informal ways of passing land down to their children and people within families giving over land or a house to another family member. Problems with tribal members being prohibited access to areas that were once communally used by the tribes continued to occur as the tribes attempted to restore significant places like tribal sacred mounds, which were eroding. Theresa, from Pointe-au-Chien, posed the question at a Coastal Protection and Restoration Authority (CPRA) focus group meeting in Baton Rouge, "how do we do marsh creation without land? Our ancestors had land and oil companies stole it."

The Oil Industry Shaping the Landscape

Louisiana is the country's top crude oil producer and the second largest natural gas producer when including the Outer Continental Shelf (U.S. EIA 2009), supplying approximately one-quarter of the natural gas used in the U.S. (National Research Council 2006). The Outer Continental Shelf is a landmass extending out from the coast under shallow waters, with "outer" referring to the lands that are more than three miles offshore and under federal jurisdiction (Freudenburg and Gramling 2011:101). Terrebonne Parish leads Louisiana in natural gas production and is third in the state for oil production



Figure 16. Example of Signs Marking Pipelines Near Pointe-au-Chien. Source: Julie Koppel Maldonado, 2012.

(U.S. Department of Housing and Urban Development 2014). By the second half of the twentieth century, the extensive onshore and offshore oil and gas development and extraction activities had dramatically altered Louisiana's coastal wetlands.

The oil and gas industry has exploited Louisiana's coastal landscape in various ways. Oil



Figure 17. Louisiana Pipeline and Platform Infrastructure Map. Source: Louisiana Department of Natural Resources, 2008.

rigs dot the horizon, straight canals cut through the marsh, and signs are displayed in the water, "warning: gas pipeline." Starting with the first coastal zone oil lease in 1921, the oil and gas companies began cutting through coastal Louisiana's wetlands (Austin 2006; Couvillion et al. 2011; Turner 1997). There are approximately 10,000 miles of canals dredged through coastal Louisiana's wetlands by oil and gas companies to move in drilling barges or lay pipelines (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling 2011). The dredged canals get wider and wider as the water current and hurricanes pull more marshland away. Furthermore, there are approximately 25,000 miles of pipelines and 3,500 offshore production facilities in the central and western Gulf of Mexico's federal waters, three-quarters of which are off the coast of Louisiana (Freudenburg and Gramling 2011:171). The dredged passageways allowed more water to rush in from the Gulf of Mexico during storms and high tide, leaving the once fertile lands barren from saltwater intrusion. Much like the river management system put in place in the region, developing passageways for the oil and gas industry and navigation through the marsh further perpetuated human control over the environment. For example, as Kane wrote, in talking about men working for the oil companies, "Eventually ingenious men devised a method of further defeating the topography" (1944:255).

To grasp the changing landscape, one has to see it through the eyes of the people on the ground and hear their stories, and then look at what has happened from above. As I left from Houma on a flyover of the area, I could more readily see the little amount of land and trees that remained. As we headed a few miles south and I saw the remaining t myself I kept thinking, there is no such th



Figure 18. Example of Passageways Cut through the Marsh by Oil and Gas Corporations for Pipelines and Boundaries Near the Three Communities. Source: Babs Bagwell, 2012

few miles south and I saw the remaining trees disappear into skeletal remains, like a mantra to myself I kept thinking, there is no such thing as a straight line in nature. But that was what caught my eye in every direction, all the straight lines cut for canals.

Standing on the land, one sees remnants and continued operations of the oil industry all around. For example, towards the south end of Isle de Jean Charles, there were remains of a bridge, torn apart by hurricanes, that was built by an oil company so the company's workers could cross the narrow bayou. While sitting out on his deck looking out across the Island, Chris told me about the noise and light pollution that became part of the landscape growing up, "Back along this back bayou, there was three wells that I know of. It was so close to the house you could see the derricks and lights and whenever they'd start drilling you could hear it all. That's [well] number four behind that house. And also had some on my uncle's property, first well on the Island." People from Isle de Jean Charles and surrounding communities were often coerced by the oil companies to lease or sell their land, as will be discussed below in more detail.

Some modern amenities were brought to the Island for the oil industry. Victor told me how the road running down the middle of the Island was built so the oil companies could have easier access to the oil wells. He explained that growing up in the house farthest south on the Island, his family was among the last households on the Island to get electricity. But in the 1950s, he remembered that lights were brought for the oil company's well nearby and "because they had to pass right there by us to go, so it was too close not to go put poles and light right there."

With development of the highway and roadway transportation system throughout coastal Louisiana and an increase in automobile ownership at this time, along with rural electrification development, as discussed in chapter three, the road and electricity further assimilated Isle de Jean Charles' residents into Anglo-American society, decreasing the tribes' geographic and social isolation. Along with assimilation came an increased economic dependence on a consumer-based society. While assimilation was forced upon them, they utilized selected aspects

of assimilation into the contemporary economic system, such as employment opportunities. Following World War II, some residents started turning to employment with the oil and gas industry, able to get to work by road access. These opportunities also paralleled the loss residents were experiencing of their subsistence-based livelihoods.

Island residents remembered only one of the wells drilled around the Island actually producing oil and the oil companies did not repair the damage they had done to the land. As Chris described, the oil companies would "make a big old opening where we used to have marsh and just leave it as it was." Pointing just outside their slightly elevated trailer, Regina told me, "Like you see right here, that's a pipeline and had they not cut into this, that would be land right now. Everywhere you look there's pipeline. You can go ride in the water, there's pipelines."

In trying to parse out which companies went where and when, I asked some Isle de Jean Charles tribal members during a story circle at Pierre and Marie's house who was the first oil company to come into the area,

Maurice: Texaco.
Louis: Oh yeah Texaco was the first one, Texaco, Exxon, and Shell. I know in Pointe-au-Chien it was Texaco.
Pierre: No, Humble.
Louis: Yeah, Humble.
Pierre: Texaco was Lake Barre.
Louis: Oh yeah, Golden Meadow.
Maurice: Leeville.
Pierre: This Island it was the Humble. And the other name, Esso.
Maurice: It's Exxon now.

On another visit Pierre explained, "Those days they had Louisiana Land, La Terre, and another company...mostly Louisiana Land, that's the one that owns everything."

The above passages illustrate the confusion brought by the different companies coming in and out in the mid-twentieth century, consolidating, buying companies out, and changing names. For example, in Pointe-au-Chien there were about seven different companies involved with channel construction (e.g., Texaco, Gulf). The Louisiana Land and Exploration Company, a Maryland-incorporated corporation based in Texas (Wysk 2014), covered over half of Louisiana's two million acres available for oil exploration by 1928, at which time it formed an agreement with the Texas Company, which became Texaco, guaranteeing it the right to explore for and produce oil and gas on Louisiana Land's properties in Louisiana (Austin 2006:677). Humble Oil consolidated their U.S. operations with Standard Oil in the late 1950s, Humble took over Esso in 1960, and in the 1970s Humble became Exxon; however, the products were marketed under these different names in different places (Briscoe Center for American History 2014).

BP was formed in 1908 when Britain acquired Persian Oil, calling the company Anglo-Persian Oil. During World War I, the British government appropriated British Petroleum's assets, which at the time was a German-owned company marketing its products in Britain (BP 2014). These assets were then sold to Anglo-Persian, whose name was switched to Anglo-Iranian Oil Company in 1935, and in 1954 took the name British Petroleum Company. The British government sold the last of its shares in the company in 1987 (Juhasz 2011:213). At that time, BP bought Standard Oil of Ohio and in 1998 bought Amoco, or the American Oil Company, followed two years later by buying ARCO, or the Atlantic Richfield Company, all of which are marketed separately but owned by BP (Juhasz 2011:213).

By the middle of the twentieth century, the oil industry had dramatically transformed coastal Louisiana's landscape. Throughout my intentional conversations and participation in people's daily activities, I began to understand the story of the oil industry in the area. During an Isle de Jean Charles story circle at Pierre and Marie's house, I put an aerial image on the table of what the land looked like around the Island in the 1950s and another image of what it looked like

in 2011. I asked the five tribal members around the table what they thought when they saw the

older image compared to 2011,

Pierre: Everything has gone.

- Julie: How has this shaped the community?
- Louis: Oh it did. Because like I said, back then, we had trees all over the place. Now you take a picture of what we had back then and now. Like I said, we used to trap back here, we used to walk and trap and catch all what we wanted. Today, it's salt.
- Pierre: It's nothing but water.
- Louis: Because they came, the oil people came and started digging and all that and that's when we started the saltwater coming and kill everything...Because they keep diggin' and they dig and when they hit oil, they still have to make that canal. And they wouldn't make no levee or nothing like that and it brought more water in. Pierre: It's all over like that.
- Louis: That's all over.
- Pierre: I remember Timbalier Island out in the Gulf there. That used to be a big island, probably three miles across. We used to walk over there. They had some hills over there, lots of hills. Then Texaco started, they give them the right to dig some canals on Timbalier Island. So they started digging canal all along, all over through and through. And then now they ain't got nothing left over there.
- ••

Julie: When did you start noticing the changes?

Pierre: It started real bad in the '80s. That's when it really started...

Maurice: We knew it was going on but nobody could do nothin' about it. Oil companies got a lot of money.

The Isle de Jean Charles tribal members discussed the saltwater intrusion and land loss

caused by the oil companies digging canals in the area. While they commented that local people

knew what was happening, the tribal members felt that people's agency was constrained because

of the power the oil companies held. Control of petroleum representing power (Freudenburg and

Gramling 2011:105), as discussed in chapters two and three, highlights the significance of the

long-standing partnership between the federal and Louisiana state governments with

multinational oil and gas corporations.

The Government and Multinational Oil and Gas Corporate Partnership

The tax breaks the oil and gas companies receive is one example of the deep connection between the oil industry and both federal and state governments. For example, with the Deep Water Royalty Relief Act of 1995, Congress cut the already low fees the U.S. was charging the oil companies to drill on the Outer Continental Shelf, and the 2005 Energy Policy Act provided billions of dollars in tax relief for oil and gas companies (Freudenburg and Gramling 2011:19). The state of Louisiana provides corporations with over \$1.79 billion per year in subsidies, incentives, and tax breaks, with a large portion going to the oil industry (Silverstein 2013:48-9).

Furthermore, almost thirty members of federal congressional committees mandated to oversee oil and gas companies had millions of dollars of investments in the industry (Freudenburg and Gramling 2011:57). Louisiana State Senator Robert Adley previously owned Pelican Gas Management, Inc. and served as a board member for the Louisiana Oil and Gas Association (Louisiana State Senate 2014). Louisiana State Representative Jim Morris was a former oil executive (Silverstein 2013:54). Chris John served in the Louisiana Congress, including serving on the House Natural Resources Committee, and U.S. Congress before becoming president of Louisiana's Mid-Continent Oil and Gas Association (LMOGA), a trade association representing the oil and gas industry operation in Louisiana and the Gulf of Mexico (LMOGA 2014). Louisiana's major environmental agencies also have deep connections to the oil industry. For example, Jim Porter served as Louisiana's Secretary of Department of Natural Resources in the 1980s before becoming president of LMOGA (Gill 1989). J.P. Batchelor of Amoco was named head of the Office of Conservation under Louisiana's Department of Natural Resources (Silverstein 2013:54). Furthermore, Scott Angelle started a coalition of oil and gas groups to oppose new federal regulations while he was Secretary of Louisiana's Department of Natural Resources (Silverstein 2013:54).

The oil and gas industry is exempt from major provisions of seven main federal environmental laws, including the Safe Drinking Water Act, the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, the Comprehensive Environmental Response, Compensation, and Liability Act, the National Environmental Policy Act, and the Toxic Release Inventory of the Emergency Planning and Community-Rights-to-Know Act (Earthworks 2011). One example of these provisions is that stormwater discharges from oil and gas drilling and production activities are exempted from the Clean Water Act's permitting requirement for all discharges of pollutants to rivers, streams, creeks, and wetlands (Environmental Defense Center 2011).

Furthermore, the Outer Continental Shelf Lands Act of 1953 permitted the U.S. Secretary of the Interior to offer and administer leases for oil and gas on the Outer Continental Shelf through competitive bidding (Freudenburg and Gramling 2011:101). The 1978 Amendment to that Act reflected a political partnership between the federal government and oil and gas interests to promote offshore drilling in the Gulf of Mexico. The Act specifically singled out the Gulf of Mexico for milder environmental oversight under the National Environmental Policy Act, exempting leasers from submitting development and production plans, including environmental safeguards for agency approval. As such, offshore leases in the Gulf of Mexico were not subject to the requirement of an environmental impact statement for development plans of a particular geographic area (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling 2011). Secretary of the Interior James Watt, under the Reagan administration in the 1980s, pushed to lease nearly the entire Outer Continental Shelf – a billion acres – for oil and gas

exploration (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling 2011).

The relationship between the oil industry and the state was further highlighted recently when the Southeast Louisiana Flood Protection Authority-East filed a lawsuit against ninetyseven oil, gas, and pipeline companies for "ravag[ing] Louisiana's coastal landscape" and demanding that the companies restore the damaged wetlands or pay for damages the companies caused that cannot be restored (Jones et al. 2013:3). Three of the eight Authority board members voted against the resolution for the lawsuit. Louisiana Governor Bobby Jindal had appointed the three members that voted against the resolution. Governor Jindal claimed the lawsuit was not in line with Louisiana's coastal restoration policy (Schleifstein 2013a). Governor Jindal then signed legislation to block the lawsuit and prevent government agencies in Louisiana from taking on such litigation. His actions could have subsequent effects on other lawsuits against oil and gas corporations, including claims against BP for compensation following the 2010 Deepwater Horizon Oil Disaster (Banerjee 2014; Neuhauser 2014). Local environmental groups have claimed that Governor Jindal's opposition to the lawsuit is tied to the over \$1 million he received in political contributions from the oil and gas industry (Schleifstein 2013b).

Oil interests also control state-promoted efforts for coastal restoration. For example, the America's Wetland campaign is promoted as "a balanced forum for problem-solving and sharing of best practices for environmental and economic interests." The goal is to save "national environmental and economic assets that support a broad U.S. economy and provides for domestic energy security" (America's Wetland Foundation 2014). However, this "balanced forum" is led by Shell Oil Company as the primary sponsor (Burley 2010:118-9), as well as Chevron, ConocoPhillips, and ExxonMobil as the sustainability sponsors. The propaganda they

promoted through this campaign, such as the President of Shell Oil Company stating, "Shell is proud to help preserve and protect this unique environmental treasure, for citizens today and generations to come" (America's Wetland Foundation 2014), contradict the actual practices on the ground.

The Chair of America's Wetland Foundation is a member of Louisiana's Coastal Protection and Restoration Authority (CPRA), the entity that designed Louisiana's 50-year Master Plan for a Sustainable Coast that outlines what coastal restoration and flood protection projects will be implemented. In 2013, the CPRA added two focus groups, community and landowners, to its discussion of coastal restoration and flood protection activities, but only after the Master Plan was already created, with the support of three focus groups that helped develop the plan: oil and gas, commercial seafood, and navigation industries.

Kerry St. Pé, the Executive Director of BTNEP, further elucidated the governmentcorporate oil relationship,

Most people blame the oil and gas companies for all the canal digging. But I don't put as much blame on them as I put the blame on the federal and state government, principally the state government because most of those canals were dug with permits, they were permitted. And I believe corporations are just like children. If they ask for the candy and you give them the candy they're going to take it. They ask for a canal, you give them a canal, (snaps fingers) they're gonna dredge it.

The above words point to the ideology about government roles and responsibilities, including making decisions to support the citizenry. However, when decisions are guided by the government-corporate oil partnerships rather than relationships with citizens and the environment, marginalized populations are often pushed into more vulnerable situations and the environment is at-risk of being further degraded. His words resonated during the bidding for oil leases off coastal Louisiana in June 2012. I stood in a room of the Superdome in New Orleans a few feet away from Secretary of Interior Ken Salazar while he gave his press conference after
opening the bids with BP an initial bid for an oil lease at \$27 million. I looked out at the sea of hundreds of mostly white, grey-haired men. There were dozens and dozens of bids, ranging from hundreds of thousands of dollars to multi-millions. I walked out of the room and looked down at the floor of the Superdome, trying to imagine this place housing thousands of survivors in the days following Hurricane Katrina in 2005. I could still hear them reading off the bids. It seemed that nothing had been learned since the 2010 BP Deepwater Horizon Oil Disaster, the largest oil disaster in U.S. history.

The BP Deepwater Horizon Disaster

BP was not the first oil spill just our biggest. BP is telling everyone that the people from the bayous are fine. They are lying. It has taken away our livelihood. Our seafood that feeds our families is no longer safe. When President Obama came here he only went to one affected community hours from my home. He didn't come here or all of the other affected bayous. He did not say what will happen when the next hurricane comes and brings all that oil into our homes. What are we supposed to do then? With each storm that passes we never know what we will come back to.

-Celine, Grand Caillou/Dulac Band of Biloxi-Chitimacha-Choctaw Indians, excerpt from digital story, 2012. I made my second trip to the Louisiana bayou region in June 2010, less than two months after the BP Deepwater Horizon Oil Disaster started, during which eleven men were killed on the rig and nearly five million barrels of oil spilled into the Gulf of Mexico from April 20 until the well was capped on July 15 (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling 2011). Chief Albert took me out on a boat around Isle de Jean Charles and showed me the boom, a floating barrier that cleanup workers were placing around the Island to keep the oil out. However, the miles of boom along the coastline did not prevent oil from washing up on the shore along the Gulf. The Spill affected approximately 1,100 miles of coastal wetlands and sediment erosion increased where the oil damaged vegetation and root systems, with the land loss increasing coastal communities' vulnerability to storms (National Academy of Sciences 2013). During that visit, Theresa, from Pointe-au-Chien, explained to me how the local parish officials did not visit her community and BP did not care about the residents; BP workers were only in their area because the tribal leaders brought them there to set up an incident command center in Pointe-au-Chien to try and prevent the oil from reaching the tribes' lands. She said they were the forgotten bayous. Her words echoed a few days later when I attended the National Commission on the BP Deepwater Horizon Oil Spill's hearings in New Orleans. The seven-member bipartisan commission was established in May 2010 by an executive order signed by President Obama (Juhasz 2011:67-8). The Commission held hearings around the Gulf Coast to hear from local people about the problems occurring due to the oil disaster. However, the "local" voices were mostly from older, white male physical scientists.

While the 2010 BP Deepwater Horizon Oil Disaster is only one incident that is part of a decades-long story, it brings to light the contamination wrought in the area by the oil industry



Figure 19. Cleanup Workers Place Boom Around Isle de Jean Charles to Try to Prevent Oil from the BP Deepwater Horizon Oil Disaster Coming Ashore. Source: Julie Koppel Maldonado, 2010.

and the corporate oil-government partnership. For example, following the BP Deepwater Horizon Oil Disaster, Governor Jindal pushed the USACE to approve a sand berms project, which was supposed to prevent oil from getting to the marshes. Despite agencies and

scientists expressing concern that the berms would not be constructed in time to be effective and could potentially do even

further environmental damage, the USACE approved a scaled-back 39.5-mile berm project. The USACE estimated the cost of the project at \$424 million. However, only "a fraction of the

planned reaches would be finished before the spill ended, and very little oil would be captured" (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling 2011:157). The sand berms project demonstrated that the disaster would be politically managed.

Part of the problem with the haphazard cleanup was BP's Oil Spill Response Plan for the Gulf of Mexico, which the Minerals Management Service, the government agency that managed the nation's mineral resources on the Outer Continental Shelf at the time of the BP spill, had approved without additional analysis. The Plan, which was copied from material on NOAA websites, did not determine how applicable the information in the Plan was to the Gulf of Mexico. Consequently, the Plan included marine life that are not even found in the Gulf, such as walruses, and listed a person as their wildlife expert who had passed away several years before the Plan was submitted. Such occurrences appear to be systemic throughout the oil and gas industry; ExxonMobil, Chevron, ConocoPhillips, and Shell had all submitted similar response plans to the Minerals Management Service (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling 2011).

BP has been particularly remiss in paying attention to safety concerns. Between mid-2007 and early 2010, BP accounted for 862 safety citations from the Occupational Safety and Health Administration, which was nearly half of all citations to the entire refining industry (Freudenburg and Gramling 2011:42). In addition, the federal government had failed to guarantee agency regulators the political autonomy to enforce and overcome the oil and gas corporate interest that continued to oppose stricter safety regulations. Instead of considering the safety of the workers and the communities along the Gulf Coast, especially given the increased safety risks of offshore drilling, members of the federal, state, and local governments and the oil and gas corporations were focused on the enormous economic gain generated by offshore

drilling (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling 2011). This focus exemplified the current development paradigm, which emphasizes economic growth at whatever cost and perceives the world as an infinite resource to be used, de-coupling humans and the environment (Maldonado 2012a).

Furthermore, the U.S. Department of Interior has historically adopted the practices and standards developed and recommended by the American Petroleum Institute (API), the largest U.S. trade association for the oil and natural gas industry and the industry's principal lobbyist, as formal agency regulations (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling 2011). The American Petroleum Institute is "actively engaged with government leaders to ensure informed decision-making so the energy needs of tomorrow are met" (API 2014). However, the Institute's work is "member-driven" (API 2014), with every major oil company chief executive officer on the American Petroleum Institute board (Juhasz 2011:282). Therefore, the suggested practices and standards that the Department of Interior has adopted are questionable as to whether they actually make operations safer or encourage industry sovereignty without government oversight getting in the way of the industry's profit margin. This points to how the BP Deepwater Horizon Oil Disaster was not an isolated event, but rather a symptom of a greater systemic, socially constructed, long-term legacy of atrocities.

On April 27, BP's internal documents estimated that 1,063 to 14,226 barrels of oil were spilling into the Gulf of Mexico per day (Markey 2010). However, a Woods Hole Oceanographic Institution research team estimated that approximately five million barrels of oil had leaked out during the course of the spill (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling 2010:16). The 1972 Clean Water Act applied penalties for each barrel of oil and gas spilled and the 1990 Oil Pollution Act deemed that the private company responsible for

the spill would need to plug the well, clean up pollution created from the spill and aftermath, and compensate the people affected. Thus, it behooved BP to underestimate the size of the spill (Juhasz 2011:58). However, affording the compensation to people affected by the spill should not have been a concern for BP, as it was the largest oil and gas producer in the Gulf of Mexico and the U.S. and was the fourth largest corporation in the world by revenue at the time of the Deepwater Horizon Oil Disaster (Juhasz 2011:213).

BP established a \$20 billion compensation fund to compensate individuals, businesses, environmental damages, and state and local response costs (Weber 2011). Individuals were to be compensated for lost income, subsistence losses, and property damage (Landrieu 2011). During the first four months following the spill, people whose livelihoods were affected could file a claim for monetary compensation with BP. After those initial months, the Gulf Coast Claims Facility processed claims.

One of the major issues in providing documentation for claims was showing the direct link to loss of livelihood from the oil spill. For example, the Gulf Coast Claims Facility required, "Final Payment Offers for claimants with no documented 2010 losses will be reviewed and calculated using 2011 losses that can be ascribed to the Oil Spill. These claimants must provide evidence specifically linking the claimed 2011 losses to the Oil Spill" (Gulf Coast Claims Facility 2011). However, with a conglomeration of disasters and co-occurring adverse events happening in the Gulf Coast region, it was exceptionally challenging to document a direct link between livelihood impacts and the BP Spill, especially when effects could occur in any number of places along the food chain, such as effects on zooplankton that are food for baby shrimp (University of Maryland Center for Environmental Science 2012), eventually impacting the shrimp, crab, oysters, and fish people were relying on to catch. The use of chemical dispersants

in the cleanup effort, as discussed in more detail below, added another element that was challenging to make direct links between loss of livelihood and oil and chemical contamination.

When I spoke with the consultant helping Isle de Jean Charles and Grand Caillou/Dulac with their claims process, he explained to me how when he first met with Kenneth Feinberg, the BP and government-appointed fund administrator of the BP Deepwater Horizon Disaster Victim Compensation Fund, Feinberg made the process sound so simple and easy, but it had been a complete nightmare. The lack of transparency in the claims process, denial and inadequacy of compensation, and Feinberg's perceived influence from BP left people affected by the disaster frustrated and confused, furthering the damage caused (Associated Press 2011; Weber 2011). Feinberg had rejected approximately two-thirds of the 480,000 claims he received (Hammer 2011). Furthermore, BP mandated that the local fishermen hired for cleanup activities to compensate for their loss of livelihood had to sign an agreement that affected their future potential legal claims (Subra 2010). Senator Landrieu said at a Congressional hearing on the claims process, "the law is deficient and can be and hopefully will be corrected so that the next time there is an environmental spill of a significant magnitude where there are impacts, not just environmental, not just economic, but community impacts or human service impacts, that the polluter, the violator in this case be held accountable" (2011).

Every time the residents were told they needed one thing to submit their subsistence claims it turned out they needed something else. I stood in the Knights of Columbus Hall in Pointe-aux-Chenes, while residents of Isle de Jean Charles filled out more forms nearly three years after the spill happened. The forms asked for paperwork and licenses from years ago that most people did not have. BP required three years worth of pay stubs, paychecks, tax returns, and other paperwork prior to the 2010 spill (Juhasz 2011:201). However, the documentation people

did have at one time was often lost to storms, such as Hurricanes Gustav and Ike that tore through the area in 2008, which was within the timeframe documentation was needed. Plus, much of people's activities related to subsistence claims were done informally, such as boats traded and used by each other, through personal transactions, not necessarily on paper. No one seemed to know what was happening with the claims process and people were frustrated over the lack of information.

A few months prior, at a community forum held at the library in Houma by the Gulf Organized Fisheries in Solidarity and Hope Coalition (GO FISH), about forty people gathered, including people from the tribal communities, sitting together in a row by family. The GO FISH panel discussed how BP was spending millions of dollars on public relations to make the country and world believe there was no problem. The panelists described how BP's public relations campaign used expert strategists to pit local residents against each other through the claims process. Congressmen Waxman and Stupak, the chairman and subcommittee chairman for the Congressional Committee on Energy and Commerce, reported that between April 2010 and end July 2010, BP spent nearly \$93.5 million on advertising, which was more than three times the amount BP spent during the same period in 2009 (Waxman and Stupak 2010).

People in the audience at the forum voiced anger and frustration over the issues they were facing since the spill. For example, some fishers west of Houma spoke about losing seventy percent of their wages during the past shrimp season because so many other fishers came to their area after oil flowed to the fishing grounds where the other fishers lived. A young crabber from Terrebonne Parish stood up and said the compensation he was receiving was "like a slap in the face...our livelihoods is priceless." In turn, a man from Pointe-au-Chien said that in his seventy years, this was the worst he had ever seen; there were no brown shrimp because the lower parts

of the food web were non-existent and therefore the shrimp were going offshore. Someone else stood up and said that before, he would see oyster shells filled with baby oysters, but now he did not see spats anymore and the shells were turning black; once that happened the shell was dead. About a month later when GO FISH held a regional meeting with hundreds of people in attendance giving testimony to the impacts they were experiencing and what they were seeing in the waters since the BP Deepwater Horizon Oil Disaster started, there was a striking lack of media coverage for the event despite invitations to news outlets.

Some residents took action to try and counter the BP media campaign. For example, Nicholas, a fisher from Pointe-au-Chien, explained to me that he did not help with the cleanup because "they were just making a show." Instead, he rode his boat around taking pictures "in case they tried to say it didn't happen over here. Know they'd try to get out of paying people, so I have pictures." Others from Pointe-au-Chien told to me that tension had been created in the community around the claims process and who was hired for the cleanup work. Some thought it would bring the community together, but instead felt it caused divisions. For example, Patrick, who had relocated about fifteen miles northwest from Pointe-au-Chien to Montegut, but still went shrimping from Pointe-au-Chien and kept his boat there, told me that he did not want to take part in the claims process because it was causing unnecessary conflict in the community, "that's what they do, they come in and tear people apart so it's harder for them to ban together." However, some people felt differently. As Madeleine, who had also relocated from Pointe-au-Chien to Montegut, said, "I think BP did good for people down there, really did." She talked about people pulling together as a community during and after the cleanup.

It was clear that people's livelihoods were affected. The disaster accelerated the trend of an already declining shrimping industry due to industrial restructuring and aquaculture imports

of farm-raised shrimp from low-wage producers in other countries (Harrison 2012). A number of local fishers told me how their catch was way down and that going out into the waters had become too risky. Marlene, who had relocated from Dulac to Bourg, explained, "a lot of times when you leave you don't know if you're gonna catch anything and then with the spill it's even a little more mind boggling to say well, am I gonna spend this much money to try and I'm gonna be in debt for this?" The cost of fuel and ice had gone up a lot since 2001 and the price shrimpers received at the dock had substantially dropped because of the influx of imported, low-priced shrimp (Ingles and McIlvaine-Newsad 2007). Therefore, shrimpers could no longer take the risk of not catching anything. When I was out shrimping with people and they dragged in a couple hundred pounds my eyes popped out, but then I saw their disappointment and they told me how they used to catch thousands of pounds. They would barely break even with a couple hundred pound catch.

Several people living in the communities described to me all the places around the country they had family members and how the people down the bayou provided seafood to them. Without the ability for people in place to stockpile and send food to family members elsewhere, people living outside the region also lost access to local seafood supplies and the social connection of sharing. Yet, it seemed that there should be enough, as twenty-five percent of Louisiana's seafood production came from Terrebonne Parish (U.S. Department of Housing and Urban Development 2014), where Isle de Jean Charles, Grand Caillou/Dulac, and many members of Pointe-au-Chien are located. So the inability to stockpile was a recent impact since the BP Spill.

Beginning my research on the ground one and a half years after the BP Deepwater Horizon Disaster started, I saw shrimpers *not* shrimping, crabbers *not* crabbing, people who

relied on seafood to sustain themselves *not* eating seafood. The impacts on the reproduction and development of fish populations might take years to determine and public concerns were raised about the safety of the seafood coming out of the Gulf of Mexico (National Academy of Sciences 2013). Residents were no longer sure of what they were putting into their bodies.

Toxic Uncertainty

Since the BP Deepwater Horizon Oil Disaster started, many locals saw things they had never seen before. But with so many co-occurring adverse issues, it was often difficult to attribute the strange occurrences directly to the BP Spill. For example, Patrick told me as we sat around his kitchen table in Montegut when he was home off the tugboat for a couple days, "I don't know if it's the BP stuff or what, but there's been a lot of weird things going on since then I'll tell you that. Like sea turtles, we never caught that over here and now you're catching them all over...Used to have sea turtles in the Gulf, barrier islands, Timbalier Island. Now catching them in the lakes, just been in the last two years...2010 the first time I've seen them caught in the lake." Others experienced strange occurrences as well. Audrey, whose family was from Pointeau-Chien and who had moved back to the area in Montegut, said,

I got some shrimp from one of my cousins, I think it was around the beginning of the shrimping season...and what I found interesting with the shrimp is the water they were in was a lot darker, it was almost black, and the heads, they had almost an oily feel to them, the substance...I had to wash and wash and wash them to get them clean, and keep washing them until your water runs clear, but I don't remember shrimp in the past that I've cleaned before being that dark, so I don't know.

She told me about her family members who were fishers talking about not seeing eggs in the shrimp like they should, skinny oysters, and no crabs. "What's caused it? Who's to say? Is it the dispersant? Is it a combination of the dispersant and the oil?" When I talked to Chairman Chuckie, who lived a few houses down from Audrey and also from his cousin Patrick, he told me how 2011 had been a terrible year for shrimp. But he was hopeful, explaining that the shrimp migrate in and out so they should not be affected as much. However, the crabs were most noticeable, worst he had seen, like only catching three small crabs a few days prior to our conversation. He did not know if it was the oil, dispersants, or what, but it was bad and did not know how long it would take to recover.

The BP Deepwater Horizon Oil Disaster exacerbated the "toxic uncertainty" that residents were already experiencing, which stemmed from multiple sources of contamination, unknown toxic substances, and the confusion caused by multiple discourses and actors intervening (Auyero and Swistun 2009:66). From the oil and gas industry, natural gas, oil (hydraulic, diesel, crude), drilling mud, hydrogen sulfide and cyanide, ethyl compounds, and sulfur dioxide cause a slew of severe health issues, including developmental, respiratory, digestive, neurotoxin, renal, and dermatological (Lasley 2011). In 2009 alone, there were 3,636 reports of oil-related incidents to the National Response Center in Louisiana and 4,888 reports in 2010, of which 2,313 were from sites also reported in 2009 (Lasley 2011).

While many local residents and fishers could not pinpoint exactly what was happening, they did know that what they were seeing and experiencing was different. For instance, at the GO FISH Forum someone brought up that they saw shrimp caught without eyeballs, and like a wave around the room, people murmured about how "we have some too" and "we all have some." Yet, fishers still needed to sell what they caught. Like Madeleine said, "they're hurting themselves because of what they're saying it's going to stop people from wanting to buy the shrimp from over here and the crabs and everything." Their livelihoods were put on the line if they voiced concerns about what they were pulling out of the water because consumers would not want to buy the seafood. While some felt they had always seen similar issues, such as fish scales getting rubbed off on the bottom of the boat, others attested to seeing deformations they had never seen in all their years of fishing and shrimping. As Nicholas said while we sat on his porch in Pointe-au-Chien looking out over his mostly empty crab tanks, "Last year I didn't want to fish [oysters] because of that oil situation. There's something in the water so I didn't want to be responsible for bringing that in....I ate some but didn't go to market with them." The deformities in the seafood people were seeing matched research studies in the area, finding abnormalities in the seafood, such as fish with lesions and deformed shrimp (Jamail 2012). Compounds from crude oil from the BP Spill were found in high levels of some commercial seafood species, such as shrimp and oysters, in the northern Gulf of Mexico (Sammarco et al. 2013).

Government officials made statements about the seafood being safe that was caught in fishing areas reopened following the BP Spill (NOAA 2010). However, a number of residents questioned what the government and BP were reporting. For example, speaking at the First Stewards Symposium in Washington, DC in July 2012, Celine, from Grand Caillou/Dulac, said, "how even though BP says it's okay in the commercials, it's not okay." There was a distinct discrepancy between what the government and BP were saying about the seafood versus what local fishers and residents were finding. Another part of the problem was that when the government tested the seafood in the area they used studies based on the national average consumption of seafood, not for people who eat it on a daily basis as the majority of their dietary intake. The U.S. Food and Drug Administration significantly underestimated the risk from seafood contaminants, including known carcinogens and developmental toxins (Rotkin-Ellman et al. 2012). Plus, it was not only the oil people were concerned about, but also the Corexit dispersant used to sink the oil after the spill. After Hurricane Isaac hit the region on September 1, 2012, a number of people feared that oil and toxic dispersants had washed ashore. For example, a couple of days after Hurricane Isaac reached the communities, I met Chief Shirell in Grand Caillou as she was on her way back up the bayou, having come from the southern end of Dulac taking pictures and putting water



Figure 20. Flooding from Hurricane Isaac. Source: Julie Koppel Maldonado, 2012.

in a plastic bottle to be tested for oil and Corexit dispersant. She saw bubbles when the water was going back out in the bayou that she had never seen before. She did not know what it was, just that it was different. I felt the uncertainty of what many people had been questioning since the BP Spill: what happens if a hurricane comes and stirs up the oil and chemicals that were sunk?

Corexit to Forget It

Victor, who had relocated from Isle de Jean Charles to Mississippi many years prior was working on a commercial fishing boat off the Gulf Coast during the BP Spill and post-spill cleanup, told me how last time he went out in the water and opened an oyster it had a tar ball in it, "Government said it was all good and then you find tar balls...It makes you realize I don't know what's going to happen in my future, is it going to hit me or what? I know it gives me a headache, working in that stuff." He told me how it had been harder and harder for him to retain short-term memory since he got sprayed with Corexit:

I got some ugly stuff from that bloodwork they did for me from BP. We were out there on Chandelier Island...we was working out there when they sprayed that dispersant...We found oil that afternoon in Chandelier Island and they had oil all over the Island and we was in it so we called it in...I got up in the night and there was a funny kind of smell.

Figured they should've got all that oil and they was spraying that dispersant. The next morning we got up and there was no oil. Went and look all around Chandelier Island and the oil was all gone. They sprayed it, they sunk it. That's why, I was breathing that stuff, I tested positive for that stuff...I don't know what's gonna happen. It might be too late. But I still work...I love it. When we didn't work after the spill, that really hurt me. That's when I caught high blood pressure and depressed...My memory since that oil spill, that stuff I tested positive, I got a loss of memory...they're gonna pay you for your health...but the money's not gonna do much good...I never had much money in my life and what's it gonna do now? I'll be sick and I won't be able to enjoy it when I'll be going down the road and forget what I'm doing.

BP first used Corexit 9527A to try and disperse the oil that spilled into the Gulf of Mexico, but after supplies ran out in mid-May 2010, BP switched to a less toxic formula, Corexit 9500A (EPA and NOAA 2010). The Environmental Protection Agency (EPA) tested the Corexit 9500A and found that the dispersant was "no more or less toxic than the other available alternatives" (EPA 2010). However, EPA data also found that of the eighteen dispersants approved by the EPA, twelve dispersants were found to be more effective on southern Louisiana crude oil than Corexit, and the toxicity of these twelve was either comparable to Corexit or even ten to twenty times less toxic in some of the cases (Quinlan 2010). For the first time, EPA approved using dispersants below the surface of the water (Center for Biological Diversity 2014), applying approximately 1.84 million gallons of dispersant to the Gulf waters by boats and airplanes (U.S. Coast Guard 2011).

Corexit 9527 and 9500 contains propylene glycol and Corexit 9527 contains 2-Butoxyethanol (2-BE), both of which are toxic and move through the food chain (Center for Biological Diversity 2014; Subra 2010). 2-butoxyethanol was identified as a cause of chronic health problems and even several deaths among cleanup workers after Corexit 9527 was used for the 1989 Exxon Valdez Oil Disaster in Alaska's Prince William Sound (Center for Biological Diversity 2014; Juhasz 2011:100; Quinlan 2010). Furthermore, crude oil contains high levels of volatile organic compounds, such as benzene, which is a known human carcinogen, and can cause health effects, such as cancer and leukemia in humans (Juhasz 2011:90; Solomon and Janssen 2010:1118).

By the beginning of August 2010, there were 361 reports of health complaints in Louisiana, including cases of heat stress, which seemed to be related to exposure to pollutants from the BP Deepwater Horizon Oil Disaster. Eighty-four of the reports were from the general population and 277 reports were from cleanup workers. However, this information was limited because the exact cause of symptoms or exposures was difficult to confirm due to the nature of environmental exposures (Louisiana Department of Health and Hospitals 2010). There was limited information on the full potential health damage of Corexit because Nalco, which manufactured the Corexit dispersants, had refused to reveal all of the ingredients contained in Corexit (Center for Biological Diversity 2014). Additionally, BP did not provide fishermen with sufficient protective gear or respirators (Subra 2010). A University of South Florida study found that the Corexit broke the oil droplets down into smaller drops and created a plume that caused the die-off of foraminifera, amoeba-like creatures that are characterized as the basis of the Gulf's aquatic food chain (Pittman 2013). Oil elements can then be transferred through the food chain (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling 2011).

The negative effects of the dispersants are challenging to quantify because the impacts "may cascade through the ecosystem, affecting one group of organisms or habitats and then another and another through the linkages among them" (Lubchenco 2011). In a recent study, one group of scientists found that adding Corexit 9500A to the oil spill in the Gulf made the mixture up to fifty-two times more toxic than the oil itself (Rico-Martínez et al. 2013). Dispersants do not entirely remove oil from the water, but rather work in conjunction with the wind and waves to accelerate the dispersal of the oil by allowing the oil to mix with water. The use of dispersants, as

Nicholas, from Pointe-au-Chien, described, made a four-mile by six-mile wide spill sink and disappear. There can be some potential benefits to using dispersants. For example, less oil might wash ashore. However, dispersants also create some very real threats, such as spreading the oil over a wider area and increasing exposure for marine life. And even though the Corexit used in the BP cleanup was on the EPA's National Contingency Plan Product Schedule, the testing required to be listed did not consider the long-term impacts of using Corexit.

Nalco included in its portfolio "technologies that increase production, reduce operational costs and protect assets in challenging environments like Deepwater & Ultra-Deepwater, Oil Sands, and High Temperature High Pressure Corrosion. We also have chemistries designed to treat the heaviest crudes and oil spills" (Nalco 2014a). Thus, Nalco is encouraging drilling under more precarious circumstances, while also selling products supposedly designed to cleanup the spills caused by such drilling. Nalco entered into a joint venture with the Exxon Chemical Company in 1994 to form Nalco/Exxon Energy Chemicals, L.P. In 2001, Nalco was renamed Ondeo Nalco, which absorbed Nalco/Exxon Energy Chemicals into Nalco by redeeming Exxon Mobil stock in the joint venture (Nalco 2014b). Furthermore, Nalco has a BP board member and top Exxon executive among its executives (Quinlan 2010).

While the three tribal communities were the closest in Terrebonne Parish to oil from the BP Deepwater Horizon Oil Disaster, many other families and communities who had lived in the region for centuries and sustained fishing-based livelihoods for generations were also feeling the impacts of the spill and decades of industrial contamination. And the effects reached far beyond the state borders. As Jaden, a tribal leader from Minnesota, expressed to me following a fellowship gathering with the tribes in coastal Louisiana,

The Mississippi River, which is one of my favorite ones, connects us. I'm up at the headwaters, and they're here at the...end of the Mississippi. I believe it's 2,225 miles

away and it takes about ninety days for something in the water up there to get down here. So when we heard about the BP Oil Spill, me and my mom went to the Itaska headwaters, the park up there, I put tobacco down in the water and a little bit of my hair. The hair helps absorb the oil, so I said well, it'll get there eventually. So that's another thing because what happens here happens there and what happens there happens here and we all have to have the understanding.

Earlier that day during the fellowship gathering, following the cross-community conversation held with the Ogoni leader, as described in chapter one, the fellowship participants discussed the commonality of cultural genocide and being seen as non-existent by a system that pollutes not only the air, but also their cultural sovereignty. Some of the participants told stories about how oil companies had destroyed the areas where they grew up fishing and shrimping with canal cuts and oil seeping in. They talked about how people working on the oil rigs had to keep their mouths shut at the practices conducted for fear of losing their jobs. The participants voiced how it was important to come together, especially for the younger generation who wanted to continue to live in the area. But this was increasingly difficult as more people were forced to relocate and the communities became scattered and dislocated.

Accumulation by Dispossession

Oil and Gas companies have cut thru our marshes, our ancestral mounds, and left our once fertile lands, barren from saltwater intrusion. They have poisoned our bounty from the waters with their quest for monetary gain from oil, not only with the oil itself but from the chemicals they used to cover up their mistakes. They have killed our trees which were once plentiful and marked our lands and left in their place a shadow of what once was.

-Babs, Isle de Jean Charles Band of Biloxi-Chitimacha-Choctaw Indians, excerpt from digital story, 2012.

Embedded in historically- and economically-driven processes of structural violence

(Farmer 2003), the colonial legacy of forced displacement the tribes' ancestors endured

continued for the tribes with some of the same entities, but in new forms. The federal and state

governments backed the interests of private oil corporations and developers over the rights of the

local residents to dispossess them of their lands and access to waters. Once land disappears under

water in coastal Louisiana, which is happening at an ever-increasing rate due to a combination of subsidence, canal cuts by the oil and gas industry, and climate change-induced sea level rise, the state takes it over and the submerged area can be leased to oil and gas corporations. This is able to happen because of laws such as the Louisiana Civil Code 450, which states, "Public things that belong to the state are such as running waters, the waters and bottoms of natural navigable water bodies, the territorial sea, and the seashore" (Louisiana State Legislature 1978). The state is allowed to claim the minerals under the water as well (Moskowitz 2014).

The neoliberal policies that the state followed played a major role in creating what Harvey dubbed "accumulation by dispossession" (2003). This concept is based on Marx's notion of primitive accumulation, which entailed "divorcing the producer from the means of production" (1994:296). Accumulation by dispossession includes the commoditization of land and involves the appropriation of the non-human environment by the elite, ruling class, highlighting the loss of environmental, as well as social and economic rights (Harvey 2003:145; also Castree and Braun 1998; Foster 1999; Harvey 2006; Kovel 2007). For the oil and gas global production network, neoliberal capitalist policies have resulted in "frontier dispossession and reckless accumulation" (Watts 2012:458), in which oil states support petro-capitalism and the logic of oil extraction is a central component in "the making and breaking of community" (Watts 2004:199).

In Louisiana, the coastal tribes were often blocked from restoring the bit of land that was left, such as their ancestral mounds. Theresa explained that Pointe-au-Chien was having problems stopping erosion around their ancestral, ceremonial mounds because of a land dispute with Louisiana Land and Exploration, a subsidiary of the ConocoPhillips multinational energy corporation (Bloomberg Businessweek 2014). The tribe would need to initiate restoration

activities in the water surrounding the mound, but could not do so because the surrounding water, which had once been land, was taken over by the state and leased or sold to oil and gas corporations.

The State Mineral and Energy Board met once a month to select which bids should be accepted for mineral leases on state-owned property (Louisiana Legislative Auditor 2013). The state of Louisiana receives 21.9% average royalty rate on mineral leases (Louisiana Legislative Auditor 2013). In 2013, Terrebonne Parish collected nearly \$5.5 million in state mineral royalties (Terrebonne Parish Consolidated Government 2014), the state of Louisiana collected just over \$1.5 billion in total mineral revenue (Louisiana Department of Natural Resources 2014a), and the federal government collected over \$8.7 billion in revenue from the Gulf of Mexico's Outer Continental Shelf (Louisiana Department of Natural Resources 2014b).

Yet, as Chris said about the royalties, "[Oil companies] made so many promises...if they didn't find nothing you didn't get nothing, and if they did they took it and you didn't get nothing. Until this well started producing a little bit...My first royalty off of that was \$9.35." While residents received small amounts of money from the oil siphoned out around their communities, the royalties were minimal compared to what the oil companies were making. For example, BP made almost \$16.6 billion in profits and \$239 billion in revenues in 2009 (Juhasz 2011:2013), the year before the Deepwater Horizon Oil Disaster. Without regulatory oversight, there was a lack of protective mechanisms for individuals to pursue compensation. The royalties also did not compensate for what was being lost.

Conclusion

Processes of domination and power structures highlighted in this chapter are carried out in communities around the world living in oil states. For example, Nigeria's neoliberal policies,

such as the Land Use Act, continued the colonial system of allowing the state government to claim resources under the land as their own instead of the local landholders (Okonta and Douglas 2003). In siphoning over \$30 billion worth of crude oil from Ogoniland in the Niger Delta, the multinational oil corporations conducted an ecological warfare that left the environment completely degraded in its wake. Cloaked in the guise of "resource politics," what is most notable about such circumstances is "the total invisibility of both transnational oil companies (which typically work in joint ventures with the state) and the specific forms of rule associated with petro-capitalism" (Watts 2003:5091). Similarly, the energy produced in the Appalachian coalfields "comes from a use of the land that treats it as disposable" (Purdy 2011:182). The coal industry in central Appalachia systematically prevents residents "from developing community resources in ways outside the state's agenda – an agenda that systematically protects coal" and argues for strip mining in pursuit of private property rights (McNeil 2011:65, 69).

In Louisiana, with purchasing power and control over local resources, multinational oil and gas corporations and private land developers had bought up vast quantities of land on higher ground just north of the communities, leaving the tribes and other coastal communities with few options as their land became further inundated by saltwater. Pointing to the continued violence against the tribes by the political and economic systems, Chief Albert said as we drove around the Island,

They probably want this island to diminish because we're moving into other communities and so the kids that we have will marry into the community and eventually the Indians are wiped out. Ask in Pointe-au-Chien and Dulac, wherever the Indians are at, they're going to move into these other communities and well, south Louisiana won't have any more Indians. So yeah, I think that Andrew Jackson is going to get his way. He's going to wipe out the Indians. Those that will still exist will be those that are federally recognized because they have their little reservation. Our reservation here is the one we have. We moved here so we wouldn't be captured by the whites and sent to Oklahoma. He laughed, "I wondered what they'd do if we asked to move to Oklahoma."

Highlighting the displacement currently faced in the context of previous Indian removals, and with few options for relocation from their region of refuge, Chief Albert indicated the cultural sovereignty that was threatened by the tribes continuing to be displaced. The following chapters address the effects experienced both by people who had stayed and those who had relocated, the experiences of dislocation from place, and how residents were adapting to environmental change, including some taking steps towards relocation as an adaptation strategy.

CHAPTER 5

THE EFFECTS OF ENVIRONMENTAL CHANGE AND FORCED DISPLACEMENT: AN ECOSYNDEMICS PERSPECTIVE

With each storm that passes we never know what we will come back to. It has become our norm to just come back, clean up, and start all over again and again and again. I recently asked my mom, 'Would it be easier to just relocate?' Some days I do think it would be easier, but then I really think about it and ask myself, 'Would it really be easier?' My way of life is here, my people are here, this is who I am. I just want be on the boat with my dad shrimping. – Celine, Grand Caillou/Dulac Band of Biloxi-Chitimacha-Choctaw Indians, excerpt written for digital story, 2012.

This chapter uses an ecosyndemics perspective to consider the health, livelihood, and socio-cultural effects on tribal members from environmental change, disasters, globalization, and forced assimilation and how these conditions have resulted in displacement experienced by many people from the three tribes, including both people who have relocated and those who have stayed. It addresses how people's subjective experience of living in a changing environment was embedded within their broader and longer experience of being economically, politically, and socially marginalized (Auyero and Swistun 2009; Singer 2011). I argue that the displaced include tribal members who have lost their livelihoods, social networks, or cultural practices due to the environmental changes and disasters stemming from the state and private interests' quests for specific development objectives.

Forced displacement is more than physical relocation, as people can experience displacement even while still physically in place (Cernea 2006). Social science literature has documented the many negative consequences for the individuals, families, and communities affected by development-caused forced displacement and resettlement over the past four decades, including, but not limited to, marginalization, loss of resilience, livelihoods and traditional skills, health and education risks, break up of family, social groups, and communities,

and the mental stress of living in a strange place (e.g., Cernea and Mathur 2008; De Wet 2006; Downing 2002; Koenig 2009; Mahapatra 1999; Oliver-Smith 2009; Scudder 2005; Scudder and Colson 1982; Vine 2009). As the three tribal communities face the potential of the entire communities being physically displaced, it is important to consider the effects already being experienced and the causes of displacement to help mitigate against the potential harm of future displacement.

Continued Relocation

With so much flooding occurring from a multitude of storms in recent years, a number of people from Grand Caillou/Dulac moved up the bayou to the southern part of Houma, especially after Hurricane Andrew in 1992. While people tended to move by individual family unit, those who relocated often moved to locations proximate to others from their community who had also relocated. For example, Greg, who had relocated from Dulac a few miles north to southern Houma, explained to me that before Hurricanes Katrina and Rita, there were not many houses in Ashland South, a sub-division in southern Houma, but now it was packed "because everybody's from Dulac out here. And I said somebody should go out to the street and draw a line to put Dulac North."

People from Pointe-au-Chien moved along the same road in Montegut, about fifteen miles north and one bayou to the west. After Hurricane Juan in 1985, a few families whose houses flooded in Pointe-au-Chien moved to the same road in Montegut and even more followed after Hurricane Andrew in 1992. People described how they used to have a lot of empty lots and cane fields along the road in Montegut, but now many lots were filled with people from Pointeau-Chien, despite the area they relocated to still being in a flood zone, but farther north along the

bayous. Similarly, a number of people from Isle de Jean Charles who had relocated clustered together in upper Pointe-aux-Chenes.

Some people from Pointe-au-Chien, Grand Caillou/Dulac, and Isle de Jean Charles moved into nearby places like Chauvin, Little Caillou, Bourg, and farther into Houma, and now with so much uncertainty of what was to come, more people could be relocating even farther north. Others have spread across the Gulf Coast and throughout the country either individually or by core family unit. Parallel relocations from over two hundred years ago were occurring once again, just now in a reverse geographic direction. Whereas before the tribes settled south at the ends of the bayous, now they were moving north up the bayous, settling into Cajun communities, who were in turn moving even farther north because of flooding.

People voiced their frustration over the injustice of continued displacement and relocation. For instance, Shirell, the Chief of Grand Caillou/Dulac, and I sat under her porch on a swing in Chauvin, watching the rain. My computer sat on my lap and I pressed the key to listen to Shirell's digital story. I asked her what she meant when she wrote in her story, "They say we can't be saved. They say that we have to relocate to preserve life." She explained,

Big industries like the oil companies, government, local government within the parish and state and federal government. This has been going on since the Trail of Tears. Get out of here is what they're saying. I know when our ancestors, Houma Courteau and his family came and established here, they did not think we'd have to run again. They came here and said wow, this place is great. We won't be bothered here. This is finally an area we can flourish in. And unfortunately his children and great-grandchildren are faced with that again. We have to leave. We're being forced out by the damage that the big companies have caused, by the lack of common sense and effort by our government...It's unfortunate that even in the twenty-first century we're still fighting this.

In the tribes' region of refuge, the interaction between colonial oppression, an oil-driven economy, and a political system promoting private corporations' interests over local rights, as discussed in chapter three, was largely responsible for the consequences of severe environmental changes the tribes faced, namely forced displacement.

An Ecosyndemics Perspective on Environmental Change and Displacement

The effects of environmental change, disasters, and globalization leading to displacement interact and are mutually reinforcing. It is not just one particular event, but rather the cooccurrence of these components that led to negative consequences for people who had stayed and people who had already relocated. Much like the causes, the effects were experienced in relation to each other; emerging physiological effects can lead to psychological effects, such as feelings of uncertainty and frustration. For example, as I sat with Nicholas on his elevated porch looking across the narrow road at Bayou Pointe-au-Chien, he talked about how the lack of catch since the BP Deepwater Horizon Oil Disaster started had been affecting people,

More anger now. They get riled up quick. You got erosion. It might get worse before it get better. But hopefully the seafood picks up, put a little smile on some people's faces. It's like a therapy session when you go out. It does something to you. When you ain't catching nothing it gets people more angry. It's not no good therapy no more. You goin' out there it's like going to the casino. It's a gamble and you hope you gonna win.

Nicholas also talked about the recent boat blessing, when family and friends gathered together to go down the bayou on boats as a priest blessed the boats before shrimp season started. This year marked the first time they did not have a lot of crabs; there were more crawfish than crabs and there were not any shrimp. I recalled seeing the giant cooler on his brother Donald's boat filled with crawfish and another half filled with crabs. But I am not from here. I did not know to look for the shrimp. I did not know the crab cooler should be full. What I saw as a plentiful bounty was a loss to him. I saw how readily the effects on a way of life could be missed when only looking superficially and not truly listening to what people are saying (Isay 2007).

As we talked, he gazed out across the bayou, at the dock where his boat sat, where his bathtub that was typically filled with crabs shedding their shells rested. Nicholas told me this was the first year he was not crabbing because the crabs were too small, yet he still had to pay Apache and ConocoPhillips to lease a section of water to put his crab traps out. Nicholas pointed to his dock and described to me how life had changed since the BP Deepwater Horizon Oil Disaster, "Used to crab boil there. Every two to three days was boiling crab. That's a big difference for me. I mostly now sit alone." He was no longer taking his seafood to market. Each time the phone rang with buyers, he took down their information but told them he had nothing to sell. During our conversation, he kept coming back to hoping things would get better. But, as he said, his therapy of being out on the water fishing was gone. Many people expressed to me that they no longer found the same joy they once did in fishing, as they never knew what they would bring back, if anything at all.

The multiple stresses and interacting effects that Nicholas described can be understood through the concept of "root shock," which Fullilove explained as "the traumatic stress reaction to the destruction of all or part of one's emotional ecosystem" (2005:11). Root shock works at both the individual and community level,

Root shock, at the level of the individual, is a profound emotional upheaval that destroys the working model of the world that had existed in the individual's head...Root shock, at the level of the local community...ruptures bonds, dispersing people to all the directions of the compass. Even if they manage to regroup, they are not sure what to do with one another (Fullilove 2005:14).

Researching the impacts of urban renewal around the U.S., Fullilove found that people experienced "a 'collective loss'" through forced displacement, "the loss of a massive web of connections – a way of being" (2005:4). One of the ways people from the three tribal communities experienced a collective loss was through the loss of their subsistence-based livelihoods due to the synergistic interaction between environmental change, disasters, and globalization of the seafood industry.

Economic Displacement and Loss of Subsistence-based Livelihoods

Until the 1960s, the three tribal communities were predominantly fishing, trapping, farming, and hunting communities. However, people's livelihoods had been greatly affected due to human-induced environmental changes. There was no more land left for trapping and hunting, and the land they had farmed on was inundated by saltwater. The fishing had changed with saltwater intrusion as well, along with the inundation of large-scale commercial fishing, shrimp imports, the global market, and the 2010 BP Deepwater Horizon Disaster exacerbating the effects of the environmental changes taking place.

Many younger and older men, both those who had stayed and those who had relocated, worked on oil rigs or tugboats, moving vessels through canals, often for the oil industry, and a few worked as welders for the oil and shipping industries because these industries offered the



Figure 21. The Tribes Have Experienced Severe Subsistence and Livelihood Impacts. Source: Julie Koppel Maldonado, 2012.

only employment opportunities in the coastal region. While providing income, the oil industry jobs tended to change family and community dynamics both for those who had stayed and those who had relocated. Driving tugboats allowed the men to still be out on the water. However, while many of the men used to be gone for a few days at a time shrimping, the trips as tugboat captains were longer, often lasting for three weeks at a time, and then returning home for a week before leaving again. Or people had to move to find work elsewhere, which also broke apart families and changed dynamics within the community. Some people described having the oil industry-based jobs as positive because they made more money, could support their children, and afford bigger boats. However, most people I spoke with who worked either directly or indirectly for the oil industry voiced how much they missed shrimping and fishing and would prefer to be doing those activities, which many continued to do on their days off. Chairman Chuckie, who had switched from being a shrimper to working as a tugboat captain, said, "even those who work in oil field go back to fish on their days off...If you grew up in Pointe-au-Chien, good chance you go shrimp or fish over there."

While many people who had stayed and who had relocated were forced to turn to other economic activities, some people who stayed in the communities still depended on going out to their backyard to catch food for their families to eat. For example, often in the early evening when I was leaving the Island I would pass one of the residents standing near the curve of the Island Road at the water's edge in his white gum boots, his feet and body slightly twisted and his hands raised in the air releasing the net that opened up into a perfect spiral, holding for an instant, before it twisted down into the water. However, now he was no longer allowed to throw his cast net out at that spot at night when all the shrimp and fish came out, where he had spent his whole life throwing a cast net out to catch shrimp to feed his family. The Louisiana Department of Wildlife and Fisheries had taken over the area and included it in the Pointe-aux-Chenes Wildlife Management area, one of the most heavily visited Louisiana Wildlife Management Areas for fishing, hunting, camping, and wildlife watching (Ducks Unlimited 2014).

It was once common to see many families gathered on their docks, each member with his or her own task but working together as a unit. This type of family dynamic still existed in the communities, but with so many people being forced to turn away from a fishing-based livelihood because of saltwater intrusion, high fuel costs, and influx of shrimp imports, it occurred in pockets instead of being commonplace. Nicholas's family in Pointe-au-Chien was one of the families that still maintained this tradition. For example, out on Nicholas's boat one night going up and down Bayou Pointe-au-Chien, the nets cranked out as Nicholas lowered them down, slowly moving along to trap the shrimp in the nets. Nicholas lifted the nets back up and his son and nephew untied the nets and released the shrimp into buckets.

A light from the boat shined towards the dock in front of Nicholas's house, where lights were on and music was blaring from the radio. His wife was sitting on a chair on the dock, next to the tubs with only a few crabs shedding their shells to transform into soft shell crabs, and another woman pulling shrimp out of their shells and transferring the shrimp to big platters. Nicholas's daughter and niece sifted through the caught shrimp, sorting the shrimp from the crabs and sardines. A few other cousins and friends were hanging out on the dock. The bayou became even darker as we pulled away from the light and headed back out to catch more shrimp. I looked out across at the marsh, the land, the houses, with water just on the other side. After another hour or so, we returned to the dock with another load. I watched the women moving about, sorting, washing, transporting the catch. Nicholas's daughter directed her brother to get the shrimp on ice. Well after midnight, I said goodnight and drove slowly back up the bayou; the light from the dock faded behind me, but I could still hear the sounds of the music coming from the stereo and the family chatting together.

Many people who had stayed and who had relocated had lost the connection to a shared family livelihood. As Chris, from Isle de Jean Charles, said in his digital story, "My grandma used to skin nutria and muskrats for fur, but that's no more. There is no more land left for trapping. Now, you have to leave the Island to do most anything." Not only had the price of fur dropped, but also with the loss of land and trapping grounds, the nutria, muskrats, and possums they once caught in abundance were no longer there. The ritual of the men bringing home the animals and the women and children skinning and drying the fur was now gone.

Local residents grew up learning to shrimp from the time they could walk, but now the time together on the boat sharing livelihoods and stories had been severely reduced. And the techniques to catch the fish had changed. Nicholas, now in his forties, explained, "I didn't grow up casting a rod n' reel so I can't get the hang of that. Used to go with a net, see a fish and circle 'em and pick 'em up. Now you reel in one at a time and that's no fun for me." He could no longer employ the knowledge passed down to him on how to fish when state regulations, specifically the Louisiana Marine Resources Conservation Act of 1995, were put in place that local residents could no longer use gillnets, which are long panels of netting held vertical and the fish are caught in the mesh of the netting. He explained fishing regulations were passed because "Big money get what they want. Sport fishermen, the weekend warriors, come down here, like it so much, then they want to take it from us."

Starting to move from a subsistence-based livelihood to a cash economy in the 1940s, and then more drastically in the 1970s as many people had to turn to the oil and gas industry for employment, was a distinct change for residents, one that further affected their sense of place and community. As was expressed during an Isle de Jean Charles story circle at Pierre and Marie's house,

Jean: Back then we were able to say we're not rich in money,
Albert: That's right.
Jean: but we are rich. Because anytime we wanted fish, crab, oysters, anything, we were able to go and get it.
Louis: And get it.
Jean: There was no limit, no laws, or anything and nowadays you gotta have a permit for everything.
Louis: Permit for everything.
Jean: So, now we have no money and no seafood.
Albert: No seafood, yeah.
Louis: No money, no seafood, we can't live like we used to. We can't do that no more.

Some of the same tribal members and others continued on this conversation thread a couple

months later at another story circle at Pierre's,

Maurice: When they had a Depression, the people down here didn't know they had a Depression because nobody here had any money. They just trade fruits and vegetables and fish.

Pierre: They'd get whatever they wanted.

Louis: They lived on the land and like I said, when they was in the Depression we was not. Everybody helped each other. Back then everybody helped each other.

The encroachment of the oil and gas industry, forced assimilation, including fishing

regulations put in place because of unsustainable commercial fishing practices, and changes in

the water- and landscape changed the way residents related to their physical environment.

Combined with being assimilated into the demands of a capitalist economy following World War II, and more rapidly through the 1970s and 1980s, local residents had lost open-access to fishing resources, along with a loss of sense of place and community.

Marlene told me when we drove around Grand Caillou and Dulac how there



Figure 22. Remnants of Grocery Store Closed Since Hurricanes Katrina and Rita, Grand Caillou/Dulac. Source: Julie Koppel Maldonado, 2012.

used to be so many stores in Dulac, but now there was hardly anything. Stores started closing after Hurricane Andrew hit in 1992 and people started relocating. More stores closed following Hurricanes Katrina and Rita in 2005, with more people relocating and storeowners no longer able to afford the high flood insurance rates to maintain the stores.

During a story circle, Marlene and a few other women who were originally from Dulac discussed the closing of local businesses in the community,

Marlene: It was because of hurricanes. And I mean, people get the shrimping business was really bad...If they had a lot of shrimp, they only got paid very little for their product.
Geraldine: Then the oil field went down.
Marlene: Yeah, so people just didn't have the money and you support your local community, you know local businesses, but when you have no money you can't support your business, so they all went belly up.
Jessica: Yeah, because it was local people that owned.

The women pointed to the conglomeration of co-occurring adverse events – hurricanes and the collapse of the local oil and seafood industries – that led to so many businesses closing in their community.

In Grand Caillou/Dulac, the loss of stores had more than an economic impact. As Celine, a young woman from Grand Caillou/Dulac, described to me as we sat out on a dock along the Houma Navigation Canal, "Well, we had a grocery store. Freakin' best meat you could buy! Oh man, I miss that place so much. And like you'd go in and see your cousins are working there and you knew everybody in the store."

Much like waving to everyone that passed by on the road and noting when they saw a car they did not know, the feeling of knowing everyone around them was often expressed as an important aspect of community life. Local residents had spent generations isolated down the bayous and were accustomed to knowing everyone and everything around them. As will be discussed further in the following chapter, feelings of displacement surfaced as the sense of

knowing their neighbors and landscape shifted and what was once known became unfamiliar.

Subsistence: Gardens

The gardens that were once a big part of residents' self-sustaining way of life were now

mostly gone. As Jean, an elder from Isle de Jean Charles, described,

Years ago we had a lot of land over here. You couldn't see. Like right now you can see miles and miles, but when I was growing up until the '60s you couldn't really see back there, it was full of big trees. And we used to do farming on the other side of the bayou. Everybody had their garden, about 100 foot rows, that's how much land there was. They didn't have all that water, it was all just a couple little ponds, that's all.

Many people who had stayed and many who had relocated nearby talked about missing what came from their gardens and not being able to find that today. Marlene, who had relocated to Bourg from Dulac, described her dad's butter beans being so good, big and still green in their pad, and she could not find them like that today. What was once a harvest in the waters and gardens behind their houses had become a food desert. For example, people in Dulac now



Figure 23. Last Remaining Community Garden in Pointe-au-Chien. Source: Julie Koppel Maldonado, 2012.

had to drive thirty minutes into Houma to reach a grocery store.

Many people referred to growing vegetables as "raising" a garden, noting a sense of pride and care, the garden being just as much a part of the community as anything else. But now, as Regina, who had lived on the Island for forty-seven years and had grown up on a houseboat, visiting family on the Island before marrying an Island native, said, "There's no more gardens, no more barrier islands. While they lose this place, they're also losing their traditions." Several

people talked about not having the "courage" to plant because of fear they would lose their crops if the land flooded, with quite a few people fearing the contaminants in the soil and air.

With the environmental changes, especially the land loss, where people used to grow crops and keep gardens in the communities was inundated by saltwater. As Chairman Chuckie explained, "When growing up, everyone had gardens. Got to point where no more gardens, soil changed, with high water too much stayed and soggy. Gardens flooded with south winds and gave up, saltwater getting in. Shut down late '70s, early '80s, most of gardens were shut down. Most people just gave up, too much work to go through that." Some people who had relocated mentioned that one positive aspect about relocating was that they could grow a garden again in their new location.

When people ate from the land and waters, they traded resources with each other. For example, one person might trade some shrimp for someone else's vegetables (Coastal Louisiana Tribal Communities 2012). While I witnessed many people still trading resources, the amount of trading and sharing had diminished. They were now forced to buy more food from the grocery store for their own families, needing money for food they used to grow for free.

Besides the stress of having to pay for what they once obtained freely, several people expressed to me that they had gained weight from their change in diet, especially since the BP Spill. People were substituting their seafood catch with foreign imports and meats they had to buy at the store. For example, Robert, who had relocated from Pointe-au-Chien to upper Pointeaux-Chenes, told me, after catching hardly any shrimp the night before, how he had gained a lot of weight since the BP Spill; instead of seafood, he was eating more meat and food he was not used to eating. He told me how he used to be able to walk outside and catch whatever he wanted to eat. But now he had no livelihood.

Health Effects from Environmental Change and Disasters

Tribal members who were still living in the communities and those who had relocated talked about changes in their own and family members' health over the years, including soaring rates of diabetes, cancer, and high blood pressure. Decades-long industrial contamination, encroaching toxic industries, chemicals from dispersants, oil spills, including the 2010 BP Deepwater Horizon Oil Disaster, and post-storm debris continued to contaminate the communities' air, soil, and water, creating severe health and livelihood effects, along with a forced change in diet (Coastal Louisiana Tribal Communities 2012; Maldonado et al. 2013). For example, an estimated 214,000 pounds of air pollutants are generated each year from every offshore oil platform (Juhasz 2011:257-8), with three-quarters of the 3,500 offshore production facilities in the central and western Gulf of Mexico's federal waters off the coast of Louisiana (Freudenburg and Gramling 2011:171), as mentioned earlier.

Furthermore, traditional means of dealing with illnesses were no longer available, as saltwater inundation had killed the medicinal plants and herbs. The tribes used to have *traiteurs*, tribal members who were gifted with the knowledge of prayer and herbs, who would go into the woods in their community to find medicinal herbs for treating illnesses. Now, Pierre, an elder on Isle de Jean Charles, told me, "We don't have no medicine no more. The saltwater killed all the medicine." Residents now had to pay to go see biomedical doctors miles from their communities, and the knowledge of the medicinal plants was being lost. As I sat with Pierre and Renée, brother- and sister-in-law, on Pierre's porch during their daily afternoon coffee hour, Renée, also from Isle de Jean Charles, followed Pierre's words and said, "Nobody wanted to learn. It is a gift. Nobody wanted to accept it. It's a responsibility."

While a number of residents said that none of the medicinal plants were left, some researchers found some plants still there and some locals said there were still some around. The difference seemed to be that the plants were not as plentiful and accessible as they once were and people were no longer spending as much time outside. The erosion of traditional knowledge was not solely due to environmental changes, but also to the knowledge being devalued. The younger generation was being integrated into and schooled in an American society that no longer spoke of these methods, but only transmitted the solutions of biomedicine, which "conceptualizes disease as a discrete entity" (Singer and Clair 2003:424), as opposed to the art and tradition of treating and healing. Medicine no longer came from the natural world outside their doorstep, but rather from a pill bottle bought at the pharmacy in places miles up the bayou. The synergies of co-existing elements, such as industrial contamination, increased flooding, loss of medicinal plants, and devaluing of traditional medicinal knowledge, led to the adverse impacts being experienced and feelings of toxic frustration.

Toxic Frustration

The contamination and pollution, primarily from the oil and gas industry, including oil spills and use of chemical dispersants, as well as upstream agricultural development, occurring in and around the bayou communities caused what Singer described as "toxic frustration" (2011:158). Tribal members who had stayed experienced toxic frustration, feeling that the unhealthy environment and suffering were caused by the surrounding industries, predominantly oil and gas, and that because of the residents' low socioeconomic status and ties between the government and oil industry, the residents could not do much about the situation.

While there were medical facilities in Houma, about twenty miles north of the communities, which included facilities that accepted Medicaid, a social healthcare program for
low-income individuals, these facilities were often seen as inaccessible to many people. And while cancer treatment centers and hospitals were available in Houma and Thibodaux, another fifteen miles north of Houma, this did nothing to resolve what was causing the cancers in the first place. Thus, residents mostly avoided thinking about these issues unless they were provoked by an event, such as an oil spill or a researcher asking questions (Singer 2011:158). Tribal members who had relocated experienced toxic frustration as well, but to a lesser extent. Many still lived within the region and close enough to still be affected, as well as having family members living in the communities. However, people who had relocated, while expressing frustration over the situation overall and what was happening to their communities and families, tended to express less frustration about their own personal health than people who had stayed. This could also be due to many younger people having relocated. Along with toxic uncertainty, as discussed in the previous chapter, the BP Deepwater Horizon Oil Disaster and use of Corexit dispersants exacerbated residents' toxic frustration because with less land and increased flooding from hurricanes and storms, there was more anxiety about oil and chemicals from the dispersants coming into the communities with the next storm.

Many people who had stayed feared the contamination in their drinking water, as well as in the soil, in part because of the heavy metals that came with flooding and the encroaching oil industry. People could no longer be sure of what they were putting in their bodies, especially since the BP Spill. Previously, longevity was a part of their heritage, but now, "we are the sacrificed communities and our people are dying younger because of new diseases we never had before" (Coastal Louisiana Tribal Communities 2012).

These words echo what Kerry St. Pé, the Executive Director of BTNEP, explained about working on water pollution control for Louisiana Department of Wildlife and Fisheries. He

found that the oil industry was discharging 89 million gallons of produced water per day along the coast of Louisiana and the average level of radium-226 in the produced water was orders of magnitude higher than the allotted discharge from nuclear power plants. It sank not just to the bottom but also into the bottom, into the same water and ecosystem that feeds and sustains the people along the coast. Produced water is a waste byproduct of the oil and gas industry and is defined as "the water that exists in subsurface formations and is brought to the surface during oil and gas production" (Bureau of Reclamation 2011:3). One of the naturally occurring radioactive materials in produced water from oil and gas production is radium-226, which can cause cancer in people if inhaled or ingested (EPA 2012). A report in the 1970s that noted the cancer-causing chemicals in New Orleans' water supply, along with the degradation of the Mississippi River and wetlands, sparked the idea that toxic chemicals were coming out of people's tap water and seemed to underline the fact that not only were the waterways and wetlands being sacrificed, but those who drank from these water supplies were being sacrificed as well (Colten 2012).

The increased contamination following hurricanes just sat in the waters. For example, Theresa told me that the local parish government told residents of Pointe-au-Chien that the parish would clean out Bayou Pointe-au-Chien. However, because the bayou is at the border of Terrebonne and Lafourche Parishes, each parish placed responsibility on the other and no actions occurred (Coastal Louisiana Tribal Communities 2012).

Besides the health effects already being experienced, a number of people who had stayed were also concerned about potential health effects to come. For example, when I visited in June 2010, two months after the BP Deepwater Horizon Oil Disaster started, Donald, from Pointe-au-Chien, took his boat out for the cleanup; when he later power-washed his boat, the copper paint came off, which normally only happened if sanded off. Some scientific experts on oil spills were

worried that boats used during the cleanup could be soaked with chemicals that could potentially seep through the boat's wood and affect the people working on the boat (Juhasz 2011:190).

While some of the health issues were not life threatening, they were chronic and new, including sinus and breathing problems. During my research in 2012, often when I asked if someone had health problems since the BP Deepwater Horizon Oil Disaster started they would say no, but then say how they had been having chronic issues that arose in the past two years. Living with decades of contamination, such effects had become part of everyday life and were normalized. For example, talking with a few people from Grand Caillou/Dulac about the BP Disaster,

Julie: Did you get sick at all after the spill?

- Jesse: We didn't get sick, but you can smell it. It'd smell like gristle. A friend of mine was taking pictures of them passing in the spray.
- Chief Shirell: Do you notice more sinus infections or cold since the spill?
- Jesse: Oh yeah, I got that. I went to the doctor a few months ago and checked my sinuses, said allergies are bad.
- Chief Shirell: I still cannot shake nasal congestion. The minute you step outside. I tried the allergy medicine, that don't work. So I said I'm gonna live with this problem. And I've never had allergies before in my life.

Similarly, Chief Albert told me how he had failed a breathing test and wheezed when he walked any sort of distance now, which were all new symptoms he had experienced since the BP Deepwater Horizon Oil Disaster started.

While unequal power dynamics between government authorities, private corporations,

and local populations can escalate local residents' fears about the harm being done to them,

especially pertaining to their health, such "conspiracy theories" were often embedded in reality.

For example, Chief Albert described concerns about food safety, "To be honest with you I

wouldn't eat anything over here because of the oil pollution. We've flooded so many times and

we know there's...heavy metals, and that don't go away." The state and oil companies portrayed

the locals' fears of oil contamination as unfounded. Yet, oil contains traces of heavy metals and nonvolatile polycyclic aromatic hydrocarbons that can pollute the food chain (Solomon and Janssen 2010:1118).

The experience of toxic frustration is something felt by marginalized communities around the world. For example, in the midst of the cholera epidemic in Venezuela, locals in the effected areas feared that cholera was actually a poison that BP workers were putting in their water, being dispersed by the oil explosions. Such fears were connected to an historical reality of inequality and violation of rights (Briggs and Mantini-Briggs 2003:253).

Sociocultural Effects of Environmental Change and Displacement

Traditions and Cultural Practices

With the changing environment and livelihoods and more people relocating, many

people, especially those who relocated, had lost the everyday traditions and cultural practices

that tied their families and community together. As Chief Shirell explained to me at her slightly

elevated house in Chauvin, just to the east and farther up the bayou from Grand Caillou,

With us having to move away and break apart, we lose the traditions. We lose the culture because we can't stay within our community and practice our beliefs...You know, when I lived in Grand Caillou, my area was American Indian. That was my family. I was brought up very heavily in my traditions and our culture and who I was and to be proud of it. And you know, we prayed. And when we were sick we were brought to our great-grandmother. And that's what it was. And we went to our grandmother and we sat down and we heard her radio playing and dad drank coffee. And you know, um, that was what we did. And when we have to move, we lose it. And those things continue and continue as long as you're able to stay in your area because that's what you're used to doing, it's practice. It's like breathing or tying your shoe...We don't have that anymore, you know. It hurts.

One of the traditions they were losing was their language. Both those who had stayed and

those who had relocated, having first lost their Choctaw language, experienced the loss of Cajun

French, adopted when Acadians settled in the region. The French language started being lost

when children were forced to speak English in school in the mid-1900s; the loss of language continued because, without land to live on, difficulty making a living any longer as a local fisher, and lack of educational opportunities, many younger people had left the area. Several younger people expressed to me that they wished they could converse with their elders in French and understand what was being said; they missed out on the sense of humor, of laughing and joking that was such a part of their way of being together. As a primary tool for communication, language is deeply tied to identity; as it was lost, so too was part of their identity.

Several people from Pointe-au-Chien voiced concern over losing their ancestral ceremonial mounds if nothing was done to protect what land was left, which holds with it part of their history. As Theresa said, "That's our ancestors...I feel [the mound is] part of us, part of our people." Their cemeteries were also in danger of washing away. People talked about going to the cemetery to visit their family members who had passed away and feeling a sense of peace and comfort when talking to them, but now the cemeteries were at risk of being lost. For example, the cemetery on Isle de Jean Charles was at risk of complete inundation and the cemetery in Grand Caillou/Dulac had coffins popping out of graves during storms and floating away.

With the environmental changes, the relocation of much of the younger generation, and the introduction of new technologies, traditions like the art of carving pirogues, making cast nets, and basket weaving were being lost; only a few elders still did these activities. Mary, an elder who was raised on the Island but moved to upper Pointe-aux-Chenes after getting married several decades prior, told me about how her mom taught her how to weave baskets from the heart of palmettos when she was twelve or thirteen. They used to have a lot of palmettos all around the communities, but now the woods were gone and they had to go to other areas farther north to collect the palmettos. She would like to see the tradition passed down, but there were

only a few people who still knew how to do it so, "When we go, it goes too." I asked Josette and

Henri, who helped collect the palmettos near where they lived in Grand Bois for tribal members

from Pointe-au-Chien to build a palmetto hut like their ancestors did, about any changes in

cultural traditions they had noticed,

Josette: Well the crafts, you know what's hurting that? Walmart, all them stores... Henri: ...Imported stuff. That's what happened. Once we started with the powwows, the dream catchers and the stuff we put together by hand, they started bringing that in and it was commercial. There's a big difference, they look the same thing, but it's not made with your hands. It's a machine that makes those things...

Josette: If we could build a community center, we could teach the others to do stuff like that...

Henri: It's like the cast nets. I remember my mom and dad tried teaching me how to do that...We used to make them cotton, then nylon came out and lasted longer, now we got plastic, which is lighter and lasts. It's a dying art, just like everything else. It's just like our fishing with the rules and regulations. I had attended a meeting at Wildlife and Fisheries a long time ago and they were talking about these turtle excluding devices you got to put in the net. Now, they claim that the trawls are killing the turtles. You don't kill that many turtles. But what's happening, your barrier islands where the turtles used to come lay is no more. The turtles can't lay. You go to Texas picking the turtle eggs, sending them to Japan for a good market for them. They say our trawlers are destroying the turtle. But the turtle has no place to lay. So you get all of these environmentalists and people that claim you're hurting the fish and stuff like that that's fighting us and you got these lobbyists to go to Washington and they shove that down your throat. And all these people that's pushing this has never been on a boat. They may have gone out once or twice. But stay a year or two on the back deck of that boat, then you'll see.

Similar to globalization changing the seafood industry, Josette and Henri connected loss

of cultural traditions with large-scale capitalist production, globalization, and the influx of lowpriced imports, and environmental changes. However, Henri also alluded to some benefits of integration, such as longer lasting material to make cast nets. Later in the conversation, Henri talked about the Grand Bois Inter-tribal powwow that the tribes had started in 1994, around the time the three communities officially formed their own distinct tribes. The last powwow was held in 2004 because the venue where the powwow took place was damaged after Hurricanes Katrina and Rita in 2005. Josette raised the need for a community center. The Island, where Josette grew up, used to have a store that served as the community center, as discussed previously, where dances, school lessons, and church services took place. But with all of the environmental changes experienced and more people being forced to relocate, there was nowhere left on the Island to serve as a community center.

Henri connected the loss of a place to gather and teach cultural practices with the loss of such practices as making cast nets, which he also related to unjust fishing regulations. He specifically pointed to the legislation on turtle excluder devices. While Louisiana's state law currently prohibits the enforcement of turtle excluder device regulations on large shrimp trawlers because it depletes shrimpers' catch by causing a hole in the net (Louisiana State Legislature 1987), new federal requirements are expected to be coming that will demand the device be used on shrimp skimmer trawlers (Alexander-Bloch 2013), which are used by local fishers in shallow waters. However, many shrimpers with whom I spoke also voiced what Henri felt about the local shrimpers not causing much damage to the turtles. Instead, Henri described the effects of land loss of turtle habitats and the global import/export industry for turtle eggs being much more impactful on sea turtles than local shrimpers.

Much like the different perspectives of the causes of land loss between outside scientists and local residents, Henri pointed to the need for local knowledge to be ascertained to understand what was really going on. But instead, Henri explained how outside lobbyists and environmentalists, without understanding the complexity of the local landscape, were advocating for regulations that affected local fishers' livelihoods. The environmental changes, regulations, and globalization interacted to cause loss of cultural practices and livelihood. As more people relocated and traditions and cultural practices were lost, so too was the tribes' sense of community.

Sense of Community

When I was at someone's house down the bayou, people were often in and out, borrowing something, stopping over to say hello, drinking coffee, the children were playing together, or a neighbor was fixing something. But it seemed the farther away people relocated, the less these social exchanges were practiced and the more people's social networks had been diminished. For example, when I asked Patrick if living on Aragon Road in Montegut, about fifteen miles north of Pointe-au-Chien, felt different than living in Pointe-au-Chien, he replied, "Oh yeah, yeah. Years ago we was always at each other's houses. Go over here, go over there. Now, they don't go visit too much...Over here, I don't know, I know that neighbor, that one I've talked to him once." He had lived on Aragon Road for six years and there were a number of other people from Pointe-au-Chien there, including family members, but people did not visit as they had in Pointe-au-Chien and they did not engage together in shared family livelihoods, as most of the people who moved worked either directly or indirectly for the oil industry and only fished on their time off. They no longer shared a common resource or specific place that they depended on for their livelihoods, shifting cultural values of sharing. And for the people who had stayed, he expressed a feeling that the communal aspects had dissipated as well.

Similarly, during a story circle, a few people from Isle de Jean Charles explained the changes in their community dynamics,

Pierre: We had our own pigs and everything we want.
Maurice: Big old boucheries when I was young!
Renée: Oh yeah, oh yeah, miss that. I remember that. They'd kill a pig.
Maurice: Get together.
Pierre: Everybody would get together.
Maurice: Whole family around here.
Renée: Fix the pig.
Maurice: Fix the pig, big ole party.

I asked if they still did things like that,

Renée: No. Pierre: No, we don't have nothin' like that. Maurice: We ain't got no more pigs. Pierre: Ain't no more pigs. No more cattle. Maurice: He's gonna drown if you bring a pig over here (laughs).

This conversation points to the diminished sense of community and sharing, as well as the change in subsistence-based livelihood strategies and family dynamics. As people's economic activities shifted along with the changing landscape, their cultural values of sharing changed as well. However, many people still living in the communities, and those who visited often, still traded resources, as discussed earlier in the chapter, but were not dependent on each other to the extent they had once been.

Some people found that the socializing they missed as the community scattered actually improved when they relocated. For example, Georgina used to live towards the end of the bayou in Dulac, but relocated further up the bayou in Grand Caillou after her house flooded during Hurricane Rita. She relocated close to where a lot of her children and grandchildren now lived, so she was still surrounded by family, with them cooking for her and neighbors bringing over shrimp and crabs. Many people who relocated nearby still went to the communities, especially Sunday afternoons after church service, to visit.

But many people who relocated, even nearby, felt isolated from their family. For example, Gabrielle described how some of her extended family viewed her immediate family when they relocated from the Island to Houma after their trailer flooded during a hurricane, "We fell into that stigma of you're from town, you don't care. When actually we did. It's not that we wanted to leave...We could've rebuilt, gotten another trailer. But how many times do you go back? It's a sad thing, but it's true."

Serena, who relocated to Bourg, about fifteen miles north of Pointe-au-Chien and a few miles from where she grew up in Montegut, described to me the difference between living in the two places even though they were so geographically close,

What makes it unique is the fact that over all these years, the community has been in this bubble down there. It's different. From being here, just to go ten miles down there, everybody is really close knit. If you're going down the road, they're going to wave. There's going to be a group of people standing on a dock somewhere, all talking and just being together. And you can just walk up and they'll treat you like you're one of them. And there's not many communities still like that. The people down there are just so welcome.

Comparing being in Bourg to Pointe-au-Chien, Serena said, "Just from being here to there, it's

that different."

When Chief Shirell told me they had lost touch with family members because some

moved as far as Thibodaux, about thirty-five miles north of Dulac, and even Texas, these places

did not seem that far to me. But then she provided the explanation that an outsider like me

needed to understand the loss of sense of community she was talking about,

You know, we're a very different type of people. You know how some people are like 'Oh God we gotta get together.' We don't know how to be alone. We really don't. Um, we're used to seeing our family every day. We are used to going to mama's every damn morning, drinking a cup of coffee, all of us. That's the routine. Mama's cooking breakfast every morning for everybody. And you stop at Mama's on the way to work. Everybody gets a hug and a kiss, I love you. We all call on Mama four times a day or we stop over there at least twice a day. And it's on the way. So, but that's been taken. Now, I gotta go all the way to the other bayou just to see my Mama. I can't do that. So now, I have to make five phone calls a day. Um, it's harder on me with the kids, you know. It's messed up a lot, it really has.

People from the Island talked about how they used to be surrounded by family, providing

places to visit and people with whom to socialize. Now, with so many people relocated, many

people who had stayed described their community as scattered and felt displaced with so many

community members leaving. As Regina, from Isle de Jean Charles, described,

They've got a space that's got no houses at all, a big space, where it used to be inhabited. Lots of people. And now, oh my God, it's like a ghost town. It was like a war zone when the hurricane came. Now you look at it and you hardly see any cars pass, you hardly see any children here. A few people here, a few children. Like when [Charles and I] first met, there were kids everywhere, kids coming out of the woodwork, but that's what made the community. We'd get there and [Charles would] crank the ice cream and everybody would show up...All the kids would come. That was a family thing...And then on Sundays they had a house where everybody used to go and eat, his mama's house. And then down the bayou everybody had a house, the families would cook on Sunday, get together, play music.

Jean, an elder, echoed Regina's sentiments when I asked him how the community felt

today compared to when he was growing up on the Island. He said,

The culture I guess of the closeness we used to have is no longer there. And I think there's still a sense of closeness but it's not celebrated or it's not lived as much as it was because when I was small, growing up, every Sunday the family, not just one or two, but the family we'd usually take the road and walk to go visit different people, go visit grandma and grandpa, aunts and uncles, we used to always do that. And everybody else wanted to do the same so if they caught us at home they visited with us. And as television came on, radio came on, all these other distractions, it's not that openness to really open and share like we did back then.

The closeness, social networks, and sense of community that were such an important part of their culture had faded. While one reason was because so many people had left, Jean pointed to another broader reason, that of a changing world and the community's integration into American society.

As outsiders came in, the communities had to deal with more issues of drugs and alcoholism from outsiders and among their own members, which, along with issues of unemployment, poverty, and frustration from on-going disasters, can also be attributed to the breakdown of traditional ideals and forced assimilation. Michelle, François's daughter who grew up just outside New Orleans, described while talking about some of the drug and alcohol issues down the bayou, "Native Americans are a very, very, very prideful people. They don't know when to ask for help, to say they're doing the wrong thing. They're gonna do it and they're gonna tell you why it was okay for them to do it...They were shoved in to a new way of life...They were shoved into a society and it's a shock." This is similar to what Fullilove described as root shock at the community level, which "ruptures bonds, dispersing people to all the directions of the compass. Even if they manage to regroup, they are not sure what to do with one another" (2005:14). During the nineteenth and twentieth centuries, the federal government's initiatives to destroy traditional tribal values and forced assimilation led to root shock and psychological effects. These effects have continued with a multitude of on-going disasters.

Sense of Security and Freedom

A number of people who had stayed in place experienced loss of security and freedom since so many people had relocated. For example, several people from Grand Caillou/Dulac told me about how they used to wander around at night, either riding bikes or strolling along the bayou, sleeping with the door open, but they did not feel safe doing that anymore. Part of the issue was that they no longer knew everybody; with people buying camps and coming and going from the community, places often remained vacant for a while, which led to issues such as vandalism.

With so many people having relocated, so too had the sense of security of knowing everyone around them and trusting them diminished. As Regina told me when I asked her what made the Island so beautiful, "To me this was heaven on earth...You could go anywhere and leave your house wide open and nobody was going to go in your house...And now you've got to lock everything. Of course nobody steals but then you don't know."

However, others still did not lock their doors and felt just as safe. This was especially true in Pointe-au-Chien, which had the highest percentage of residents still in place of the three communities. As Theresa wrote for her digital story, "Everybody knows everybody. You can

stop at the first house and ask where so and so lives. We don't lock our doors. We trust everyone here." Even in Pointe-au-Chien though, some people voiced a mixture of feeling secure and insecure. For example when I asked Frances why she stayed in Pointe-au-Chien, she explained,

For one thing I feel safe over here. Everybody's right here and I know if I don't fish too much, but I know if I feel like getting fish. I used to throw the cast net all the time and catch all my shrimp too...But I don't go out there by myself anymore. There used to be people. They had a shrimp factory out there so I would go out there and there was somebody. So I don't do that anymore. I would like to, but I don't do it.

Along with the changing sense of security, many people also felt a change in their way of life, which some articulated through feeling a loss of freedom. Both people who stayed and those who relocated nearby talked about the feeling of freedom and peace as one of their greatest joys living down the bayou. For example, when I asked Renée during coffee hour on Pierre's porch, across the street from her house, her favorite thing about living on the Island, without hesitating she said, "Freedom." And as Gabrielle, Pierre's granddaughter, expressed when we sat chatting in her living room in Houma,

My favorite thing about going to the Island is I always felt free. Felt free, my joke is always I'm from down the bayou because I don't have no shoes on. Because no one wears shoes...You can just be free and take a step back...Everything goes at a slower pace. It's wholesome. That feel of freedom from the world, of society, of things you're supposed to do, when you can just relax and be yourself and be family. Just think of what your ancestors used to be like, just enjoy the beauty of Isle de Jean Charles...Swing on the porch. [My son] runs from the front of the house to the back. He loves it. He loves being outside. He has that same feeling, the freedom.

However, that sense of freedom was starting to change. Some tied the change in feeling of freedom to integration into American society and the changes in statewide fishing regulations, such as the use of gillnets and turtle excluder devices previously discussed. For example, when I asked Chief Albert about growing up on the Island, he said, "It was very, very nice. Freedom to roam wherever I wanted to, fish, hunt, and nobody would bother us. And now you throw a line right there the game warden will be checking you out." Others voiced similar feelings during an Isle de Jean Charles story circle when I asked them what their favorite thing was about living on the Island,

Louis: Fish whenever we want, we didn't have to worry.
Maurice: Didn't have to worry about the season.
Louis: I told [game warden] I'm an Indian, I don't need a license I can fish. Fifty-seven years old and didn't own a license until not too long ago and I was fishing everyday, everyday. I even owned boats and everything and was fishing and the game warden would come and shake their head. I'd say hey I'm an Indian I can

catch me some fish!"

Tribal members pointed to the enforcement of regulations in and around their communities that came with being forcibly integrated into American society. These regulations, such as the one discussed above about needing a fishing license, were often perceived as a means of taking away resources the communities had relied upon for generations. The tribal members saw themselves as sustaining and conserving resources for communal use, as pointed out earlier in Henri's and Frances's comments about oystering, while regulations were put in place because of large-scale commercial and recreational fishers. When the communities were isolated, the residents felt a sense of freedom and community connection. But as they were further integrated into American society, the landscape continued to change, and more people were forced to relocate, the sense of freedom and community had diminished.

The Next Generation

Several people I spoke with who had young children, especially women who had already relocated, expressed fear that their children would not get to experience life down the bayou. As Chief Shirell wrote for her digital story, talking about the dying trees and saltwater intrusion, "Things are changing so quickly I fear that my grandchildren will never know the joys of what I experienced as an Indian child living on the bayou." Similarly, when I asked Serena, who had relocated to Bourg from Montegut but whose family was from Pointe-au-Chien, about some of her favorite things about visiting Pointe-au-Chien, she said,

The landscape. I'm a water person. Being able to go down there, take a boat ride. I would hate for that to go away and that's what scares me the most about the water coming in. I don't want [my kids] to miss out on that. When they get in their teenage years, I want them to have those experiences. And then their kids. What's going to be there for them? How much of that are they going to be able to experience?

On the Island, some people did not like their children walking along the road anymore, even if it was to go to a family member's house. Whereas there used to always be people around and outside, now there were empty spaces and outsiders sped down the road to the privately owned marina at the end. However, with land loss, subsidence, and sea level rise, the road was the only place for the children to play because there was hardly any land left behind the houses.

Conclusion

This chapter demonstrated how the synergistic interaction of co-occurring environmental change, disasters, globalization, and forced assimilation caused livelihood, health, and sociocultural effects for both people who had stayed and those who had relocated. While many people had already relocated, a number of people still residing in the communities were experiencing several forms of displacement as well. Thus, much like the negative consequences that have been documented about the effects of physical displacement, I found that when the environment people depend on for their livelihoods and way of life is drastically altered and degraded, affecting people's livelihoods and cultural practices, they also often experience a sense of displacement. Many people who had stayed experienced economic displacement, loss of subsistence-based livelihoods, and loss of sense of freedom and security. Many people who had relocated often did better economically, but their jobs, often in the oil industry, changed their family dynamics because they were often away from their family for longer periods of time.

They also had to reconcile no longer having much time for fishing because of other jobs, but being fishers, as Paulette, who had relocated from Pointe-au-Chien to Bourg, described, "in people's hearts." Additionally, people had to resolve now working for an industry that they saw as destroying the water- and landscape where they were raised and where their family had sustained their fishing livelihoods for generations.

Both people who had relocated and those who had stayed experienced the loss of a shared family livelihood; diminished sharing and resource exchange; loss of traditional medicine and healing and the knowledge that goes with it; loss of language, traditions, and cultural practices, such as making cast nets and basket weaving; and loss of sense of community and social networks. Both groups also experienced health effects, such as diabetes and cancer, as well as toxic frustration. These issues were generally worse for people who had stayed, although still a problem for people who relocated nearby. As will be discussed in the following chapter, these experiences pervaded people's memories, identity, and sense of place, creating feelings of displacement.

The effects people experienced from the environmental changes in large part stemmed from the state and private interests' quests for specific development objectives, namely the extraction of oil, and were embedded within a broader social and economic context, discussed in this chapter through disasters, globalization, regulations, and forced assimilation. The experiences highlighted in this chapter point to the potential consequences of increased environmental changes and need for mitigation against future displacement, which is becoming a rapid reality with increased impacts from hurricanes, sea level rise, and continued development for oil and gas extraction.

CHAPTER 6

"WHEN I GO BACK NOW I GO KIND OF BLANK": PLACE, MEMORY, CULTURAL IDENTITY, AND PRACTICE DOWN THE BAYOU

If we lose the Island, we lose what brings us back to it. And that's the idea that that was our place. It was our place. Everybody else can say, the government considered it uninhabitable, and we took it and inhabited and we made it our place, and now it's gone. It's going. And if it goes we'll no longer have our special place. That's the one thing that keeps us together as a community, as a reservation, is we had our place. We don't have our place anymore. We have no place. — Gabrielle, Isle de Jean Charles Band of Biloxi-Chitimacha-Choctaw Indians

This chapter focuses on place attachment and placelessness, looking specifically at the relationships between environmental change, place, cultural identity, practice, and memory. It explores people's experiences of displacement while still physically in place when the place that people are attached to through their livelihoods, local, traditional knowledge, and social memories is considerably altered and degraded. By understanding the connection between people and place, it is possible to more fully understand the impact of social, political, and economic power structures carried out in the space in which people dwell and carry out their livelihoods (Thornton 2008:13).

Place Attachment and Placelessness

One of the ways I began to better understand the connection between the landscape and people was through an early morning run from our camp in Pointe-au-Chien the day before Hurricane Isaac hit. I left at 6:30am thinking I would beat the August heat. But when I started on the first mile down to the marina at the south end of Pointe-au-Chien on the Terrebonne Parish side, as I watched the sun rise over the water and envelop the dead trees in yellows and reds, with a clear sky above and heat starting to radiate off the road, I knew I was mistaken. I got down to the marina and saw a few people fishing from the dock. A few horses owned by a local resident grazed on the ridge to the left, as the rising sun reflected off of top poles of the shrimp land nets. A swarm of gulls flew across, mixed in with a few pelicans shifting from one dead tree to another, landing on a limb of a dead tree that was on land the previous October but was now in the water. The bayou water flowed slowly past me, meandering along as I saw Robert and his son coming back up the bayou, pulling up netting in the back of their boat. A few herons flew across the bayou to perch in dying trees along the water's edge. The sun arched higher in the sky and its light spread across what was once marsh and land but was now water. A few trucks passed, parking along the road to establish their fishing spot for the day. Chickens scurried across the road in front of me, while a few cows grazed atop the levee.

I looped around the other side of Bayou Pointe-au-Chien. I ran about one and a half miles down Oak Pointe Road to where the land ended and turned around at the last trailer, which was located next to the remaining stilts of a house that was destroyed during a recent hurricane. I saw a friend in his boat hauling up crab traps.



Figure 24. Shrimp Nets Near Pointe-au-Chien. Source: Julie Koppel Maldonado, 2012.

He was bringing in his traps to get ready for Hurricane Isaac. He told me he had not caught any crabs anyways. I jogged past the small business of a local resident where people from Pointe-au-Chien sold their shrimp; some of the guys were standing outside sorting the shrimp bought that morning. I looped back around and down the Island Road. I passed people fishing off the sides of the road. I ran into Theodore, from Isle de Jean Charles, who was driving down the road. He had gone out to get a newspaper, eighteen miles round trip, as delivery service had stopped to the

Island after the Island Road was damaged during Hurricanes Gustav and Ike; the service did not resume once the road was fixed. As I ran back across the Island Road, I watched the sun's rays shine out over the water, across the eroding marsh and the remaining skeletal trees.

Places are a social construct in which people and spaces continuously affect each other. Sense of place can be described as the "connection between people and the places they repetitively use, in which they dwell, in which their memories are made, and to which they ascribe a unique feeling" (Morgan et al. 2006:706). Places are given meaning by human experience; as places are "created, occupied, traversed, and made meaningful by human activity, spaces and places are implicated in the constitution of the identities of the very actors that produce them" (Erickson 2003:141; also Thornton 2008:25). As Chief Shirell described,

I've always wanted to be able to take my kids and play with them in the woods like I did so they could see what it was like to be an Indian kid growing up in that setting because you become one with Mother Earth, you respect her. You get to see all of her beautiful gifts. It's important. And with everything that's happening I can't give them that. I think that's what hurts me the most. As it was given to me by my parents, just like it was given to them by theirs, and I can't give it to mine. And I can't give it to mine. And they won't be able to give it to their children. It's a hard reality to face.

As people's everyday life experiences, memories, and events are carried out in a specific place, the attachment developed to that place creates a sense of their own identity (Burley 2010:41). For people with strong place attachment, there is a relationship "between a people and the place it occupies. It is formed by giving culturally shared emotional meanings to a particular space or piece of land that provides the basis for the individual's or group's understanding of and relation to the environment" (Low 1992).

Because of all of the environmental changes occurring, particularly intense amount of land loss, as shown in figure eight, tribal members were unable to pass down some of their traditions to their children and sense of belonging to that particular place.



Figure 25. Dead Tree with Land in Front in October 2011 (Left); Same Tree in the Water in July 2012. Source: Julie Koppel Maldonado, 2011 and 2012.

"It's the Place I've Always Known as Home": Belonging to Place

Isle de Jean Charles has always been home for my family. When you take a right turn on the road here, that's my spot. I was born here, my three siblings were born here, my parents were born here. When I was growing up, we lived surrounded by family on all sides of us, aunts, uncles, grandparents... My home is this, my people is this right here. It's the place I've always known as home. This land has fed our people. It may not be much, but it is ours. Being Native there is a strong connection to the land; it gives to you and you give back to it.

If a storm brought oil into our homes and the government said we couldn't go back, I couldn't put the impact into words. I still want to live here because I'm Native American, because I'm connected to the land. I'm going to live here as long as I can. I belong here.

- Chris, Isle de Jean Charles Tribe of Biloxi-Chitimacha-Choctaw Indians, excerpt from digital story

Place attachment is about defining one's identity as "belonging" to specific lands (Cernea

2005; Kibreab 2000). People often expressed feeling displaced through their feelings of

mourning for a lost home. The concept of "home" referred to a place where people were tied

together through relationships formed by shared interests or beliefs, where their identities had

been formed through knowledge and understanding of the local landscape, history, culture,

politics and economics (McNeil 2011). As Chief Shirell described in discussing the concept of

home, "it's what our culture and heritage is all about, it's where we live, it's our family, our

friends. It's everything about us. Home's not a house, home is your community. It's where you

grew up, it's where you want to grow old and die. It's just where you want to be."

Some residents talked about their resolve to stay because the place was home. For example, as I stood with Lee sorting the shrimp at his land net at the end of the marina in Pointeau-Chien, I asked him why he kept living in Pointe-au-Chien despite the challenges. He said he stayed because "this is my home, this is where I've always been." This sentiment echoed other residents' feelings as well, such as Theresa described to me in English what Sophie, an elder from Pointe-au-Chien, had said in French, that despite the flooding she stayed because "She's home, that's why she's stayed. She's home. She was born here and raised here and she's gonna die here." This is also similar to what Regina, from Isle de Jean Charles, discussed when describing the meaning of home, "the place you were born. That's your station so to speak. But it's more than just a place where you were born. Your ancestors were here. The people before you were here. The genealogy, the tradition, everything, this is where you belong right here."

People also described the concept of home as being the place where they carried out their livelihoods. For example, as Antoine, a fisher, explained to me over a cup of coffee at his house in Pointe-au-Chien, he stayed because "I like it down here. That's my life. That's where I do my living."

Many people who had relocated talked about the bayou still feeling like home and where they wanted to be, but to others who had relocated, as well as some who had stayed, it felt less like home as both the landscape and community had changed. For example, Celine, who lived with her family in Grand Caillou, and I drove around Dulac, the next settlement down the bayou from Grand Caillou, so she could show me the street where she grew up. Many people had moved farther north and new people, including drug dealers, had moved in, changing the dynamic of the community. As we drove along, she pointed out all the factories, stores, and spaces that looked like bombed-out remnants of building material. She showed me where her

grandmother's house once stood on Shrimper's Row. She said it used to be the most beautiful place but now was so ugly and that she did not know the people here anymore. This is similar to the root shock that Fullilove described people experience at the individual level as "a profound emotional upheaval that destroys the working model of the world that had existed in the individual's head" (2005:14).

Several people I spoke with experienced a similar sense of root shock when they felt attached to a place, even if they did not grow-up there. For example, when I asked Henri, who grew up in Houma and only lived on the Island after getting married, why he still felt such a strong connection to the Island, he said, "Like I said my daddy's from there. You could start from one end of the Island to the other and somewhere, somehow we're related. Like I said, my heart is there."

Being in the space where one's ancestors came from can create a strong attachment to place. This can also be true for people who never lived in a place, but trace their heritage back to it. For example, when Babs and I walked behind Pierre and Marie's house one evening, as we stood up along the levee looking across the open water to Montegut, the sun sat on the horizon just above the water. Two wispy clouds streaked across the sun. Babs gasped. The reds, oranges, and yellows deepened and she asked me, "You ever get that feeling like you're meant to be right where you are?"



Figure 26. Example of Ghost Forest and Land Loss Near the Three Communities. Source: Babs Bagwell, 2012.

Feelings of belonging to a place were tied not just to what the place was at the moment, but the memory of what it had once been. Some who grew up in the communities but left for many years before returning still felt a strong place attachment and sense of belonging. For example, when I asked Jean why it was so important to him to stay on the Island despite having left for many years, he said, "Because this is where I grew up. What I see here is left over of what I used to know." One of the ways that residents talked about being connected to place, and now feeling dislocated, was through their livelihoods and subsistence-based activities.

Sense of Place: Food Production and Subsistence Activities

Several people expressed disbelief over the changes they were experiencing, which were made tangible through the loss of subsistence activities. For example, when I visited with Regina and Charles in their trailer that was raised a couple feet off the ground on the Island, I asked them to describe what the Island was like when they were younger,

Charles: It was beautiful. We had goats, the cows they had...All the way back there, the trees they had in the back, all the land they had would go to Montegut, and all the way to the curve there. They had a lot of trees right there going all the way to Pointe-au-Chien...From now, you never thought it would be something like this. Back here there was land where we'd go hunting. There was a little canal we'd go down in a pirogue.

Regina: Now it's a lake.

- Charles: Ducks, it was great hunting, fish and all that. Could swear it would never be like that. Ate up a whole lot...
- Regina: Him and I used to go huntin' and all this back here was marsh and the front of here was marsh. Could barely put a paddle in there to paddle it was so full of land. Got to use a push pole to get where you'd go hunting. Take a look at it now. You can trawl in it.

Sustaining themselves from the land was also about belonging to a place. From trapping

the same lands as their grandfathers and fishing where their parents did, the accumulated

knowledge of generations pursuing the same subsistence activities across the same land- and

waterscape tied people together through a sense of familiarity of and connection with the land.

Many people's memories were embedded within food production. As Marlene, who had

relocated to Bourg from Dulac, said in her digital story,

Every year, my brothers and I were pulled out of school around October because daddy was a shrimper and trapper. We would go to our camp a few bayous to the west, which we could only get to by boat. Daddy leased property where he trapped muskrats, minks, coons, and otters. Daddy and mama would skin the animals. My brothers and I would help put the skins out every day to dry, making sure to watch for weather in case we had to bring in the skins. Daddy and my brothers would go out shrimping and sell what they caught to the dried shrimp platform. I stayed at the camp with mama and we would fix the garden, filled with green beans, corn, potatoes, okra, cucumber, cantaloupe, tomatoes. We ate shrimp and crabs when they were in season.

As food "is a paramount element of culture, it is also a paramount element of place. For

to procure food – to subsist – is quintessentially to dwell, to gain sustenance and 'real being' from places" (Thornton 2008:119). Subsistence activities helped shape peoples identities, such as identifying themselves as shrimpers, trappers, or farmers, and defined a place through people's experiences of seasonal cycles and memories. Time was not experienced by the twelve-month calendar as much as by seasons and cycles for gardening, trapping, hunting, and fishing. While some of this remained true today, such as people's experience and knowledge of shrimping in line with the moon cycle, time for these activities was now designated by regulations set by the Louisiana Department of Wildlife and Fisheries on when these activities could take place, in big

part due to large-scale commercial fishing and depletion of resources, as discussed in chapter three. Similar to what Thornton found among the Tlingit people of Alaska, many people became alienated from the food production practices that united them across generations (2008:141). People also experienced place attachment through their local knowledge of place, and displacement of that knowledge as the land- and waterscape changed.

Place Attachment, Local Knowledge, and Dislocation

The changing environment led some people to feel dislocated through loss of local, traditional knowledge, which was sometimes experienced as a shift in sensory perception. For example, as Chief Shirell, who had relocated from Grand Caillou to Chauvin, expressed, "There's this certain smell in the morning of the dew on the leaves...and you just take in a deep breath and you miss that...I don't smell those smells here. I wake up in the morning and go outside and take a deep breath, it's just not here." Those who had stayed were still able to enjoy those senses; as Marianne, from Pointe-au-Chien, described, "When you come down the bayou and start smelling the dew and marsh, you know you're home." However, with fears about toxins in the air and water, the smells did not necessarily bring the same feelings of joy residents had once known.

Dislocation and Uncertainty

The landscape changes, such as erosion and increased flooding, created feelings of dislocation among residents and uncertainty about whether or not their lands would be completely inundated. That sense of uncertainty started becoming a part of their everyday world. As Celine told me while we sat alongside the Houma Navigation Canal,

To see the storms and then leaving and then having to come back, and not even knowing what you're going to have anymore, that's tough. I never realized how tough that was

until someone who was living with us was living out of state and got so emotional because water got in the house and they're like, how do you guys live like this? I'm like, why are you crying? This is just normal. And that isn't normal, it's not! It's become the norm.

Some people felt a sense of uncertainty about not knowing what the next hurricane would bring, with the BP Spill only increasing the uncertainty. For example, when I visited during the summer of 2010, Theresa was telling friends at her church that if a storm came through they would have to leave and take everything because if oil came in with the storm waters the place would be condemned and they would not be allowed back. She talked about needing to take their freezers filled with shrimp in case they could not shrimp anymore, signaling the importance of the resource.

While some people who helped with the BP Spill cleanup felt this was not a concern, feeling like they had taken action against the oil coming onto the land, many people voiced a similar fear two years later. For example, Celine and I stood barefoot in the water across from the small, eroding beach in Dulac where her family and others used to gather after the springtime boat blessing. We tried to avoid the occasional crab nipping at our toes and she voiced concerns over what would happen if another hurricane brought in the oil. She said there was a reality here people did not want to face so they did not talk about it. There was so much unknown. Would they be able to return? Tears welled up in her strikingly dark, youthful eyes and she looked straight into mine. I started to say it was going to be okay. But then I clamped up. We hugged tighter with the water rushing over our feet, hugging, crying, hoping, most of all, not knowing. A few months later I stood in the flooded water in front of Celine's family's trailer a couple of days after Hurricane Isaac hit. The same fears resurfaced, not knowing how much oil from the BP Spill and chemicals from the Corexit dispersant were being washed up onto the land and around their houses.

Some people expressed uncertainty and a sense of dislocation over what it meant for their

identity and cultural practices if the land completely disappeared and the community scattered.

As Theresa described in her digital story,

You need your people and you need your land. But our land is slowly washing away. Without the land, our community will be separated. Our younger generation is leaving. Pretty soon we're going to be just an elderly community. The land, at least what's left, is what keeps our community together. If we scatter into other communities, we will lose our Indian bloodline. We want our children to be able to stay in the community to keep the tribe going.

If people do not continue to reside in the communities and experience the landscape and

waterways, the knowledge of that place that helps create a common identity will dissipate.

Gabrielle, who was originally from Isle de Jean Charles but had relocated to Houma, voiced this

concern when she said,

What will the people have? It's erased. That's it, they won't have that. They can't say, oh okay we're going to go back to mama's house and cultivate the land and do this and that. You're going to miss that whole sense of who we were, the people playing in the road, teaching your kids to swim before they could almost walk, you lose the art of fishing, you lose those things.

People's concerns resonated for me as I did a flyover of the area in a small airplane. I saw

the seemingly endless clumps of dead trees and stumps in the marsh and land. I saw the water

just behind people's houses and how there was not much more high land left to go to in the area.

"It's the People That's Made the Island": Social Memory of Place

I sat with Gabrielle in her house in Houma while her children played in the other room.

She started talking about the important role storytelling played in maintaining their culture.

Gabrielle, who had relocated to Houma from Isle de Jean Charles after her family's trailer

flooded during a hurricane, explained, "the stories, those are the things we're going to have, so

we have to keep those alive in order to keep the memory of it alive and to keep the culture alive because if not, when the Island goes the culture's going to go with it."

Social memory is "the process (or processes) through which a knowledge or awareness of past events or conditions is developed and sustained within human societies, and through which, therefore, individuals within those societies are given the sense of a past that extends beyond what they themselves personally remember" (Cubitt 2007:14-15). Memory is thus subjective as well as social (Fentress and Wickham 1992:7). The past not only produces the present, but the present also produces the past, in which memories and re-telling of the past are selected and made significant through what makes sense for the present (Cubitt 2007:27-8). For example, when most people talked about memories or stories from the past, they did so not based on time, but rather within the context of a hurricane. Instead of saying something happened in a specific year, they described what hurricane occurred when the event took place.

One example of what people's social memory focused on started out as a story about trapping. At a Grand Caillou/Dulac story circle, Geraldine, in talking about one of her favorite memories, said, "I remember [dad] coming home with sacks of nutrias and muskrat on his back, carrying them from the swamp. Somewhere, we would get there and skin these animals and dry so he could sell them up the bayou." Geraldine and Marlene then started talking about oil companies destroying the land, which transitioned Geraldine back to the memories of her family working together trapping and skinning,

Geraldine: And that's gone. That's been gone.
Marlene: Yes, even the muskrats. There's no more of that.
Geraldine: And that's how we lived.
Shirell: Simple, simple life. You know, an honest, hard working simple way of life and nobody bothered anyone.
Marlene: And that's been in the making I think. The United States deals so much with the countries, you know the other countries.
Shirell: Foreign trade.

Marlene: Yeah, foreign trade that they make deals with them to destroy the fishing industry down here because that's been talked about for years.Shirell: If I read it was an import, I'm not eating it, I'm sorry. Have you read what's in an import?Marlene: It's sad, but that's what's happening.

Starting from trapping and livelihoods, the women's conversation traveled through the effects of environmental changes and loss of subsistence activities to the effects of globalization on their livelihoods and way of life, pointing to how the local shrimping industry had drastically declined in Louisiana after the significant increase in imported shrimp in 2001 (Harrison 2012; Ingles and McIlvaine-Newsad 2007). Such stories can be used to convey what once existed and the environmental changes, social relations, and political and economic dynamics that shaped people's current experiences.

People often connected the past and present together by linking experiences and knowledge across generations. For example, when I stood with Antoine on his back porch looking out at the small clumps of remaining marsh between his house and the couple miles across to Isle de Jean Charles, he explained how "we used to be able to walk to the Island from here." He said "we," but when I asked if he was ever able to do that he said no, that was more what his grandfather did.

Their social memories created a link between people and between people and the landscape by forming a common, shared community narrative in which people shaped the landscape with which they identified. As Henri and I sat in his living room in Grand Bois talking about how much he would like to see the relocation happen for Isle de Jean Charles so the community could come back together, Josette, who was in the kitchen making us shrimp patties for lunch, shouted, "It's the people that's made the Island, not the Island's made the people."

I asked Henri what would happen if people from the Isle de Jean Charles tribe were able to relocate together as a community. He said, "It would be like the old days. It would be just like the old days." He continued, saying that if they had been able to relocate together already,

At three o'clock everything would've shut down. Everybody would have gathered, have coffee and beignets in the afternoon. Just to bring our people back. And there's a lot of the people that's moved away because of erosion and stuff, in fact they're still looking, let's get our community back together. Even the younger ones. Let's get our community back together.

He talked about how they used to all gather at the old Chief's place on the Island, "And even the younger ones say they'd like to see that happen again. Every morning when I say my prayers I ask God to give us the relocation." Through idealizing the past, he created an idealized future of what community-wide relocation could bring. Similarly, when Chief Shirell and I stood on the land where she grew up, she told me how the area had been perfect growing up, but then moments later talked about the segregation and discrimination they experienced. Such memories worked to isolate the past from its social and political context. Creating an idealized version of the past highlighted the even greater contrast to what the communities were now suffering. And by having an idealized version of the past, people in the communities had a model for what they wanted to get back.

A particularly revealing moment came during the above conversation with Henri. I brought up the topic of when he left the Island in the 1970s. He looked down at the floor and then, peering over the top of his eyeglasses, asked me about my family's movement. I told him where my extended family lived and about my own movement. When I finished talking, he sat up a bit more, signaling that he was ready to respond. He breezed past his own personal life but described in detail the history of his people and how they came to live down the bayous. At times I had difficulty keeping up with whether people were referring to the past, present, or future. Tribal members weaved stories together from the Trail of Tears, to their own ancestors being displaced and escaping down the bayous, to the racial segregation they lived through themselves, to the last half-century of environmental destruction and outsiders' resource control, to what would happen if measures were not taken to stop the flooding and restore the land. Social memories of the past were constructed through what tribal members were told by their ancestors about being Indian, escaping down the bayous, and adapting to their new environment.

Memories and Dislocation

For people who had relocated, there was distress over going back to their communities and remembering what once was. For example, Victor told me over the phone about how much he would love to come back from where he lived in Mississippi, about 140 miles northeast of Isle de Jean Charles, and visit his family on the Island. However, it was hard for him to go back so he did not go very often. He had a lot of good memories from the Island, but when he went back now he went kind of blank. He told me about the pictures he still had of all the trees that were once near the house where he grew up and the cattle for which his family cared. But after the saltwater came in and the land eroded, the trees died and it was no longer possible to sustain cattle on the Island. He talked about how quiet the Island used to be, with the only sounds being buyers coming to pick up crabs and shrimpers going to sell their shrimp at the factory in Pointeau-Chien. Now, large trucks passed regularly as outside recreation users drove to the south end of the Island to launch their boats from the private marina or to go to their fishing camps.

Similar to Victor's experience, Chief Shirell talked about how she still went to Shrimper's Row in Dulac for tribal business, but only stayed briefly because it made her too sad

to see what the community and landscape had become. And when I asked Josette, who was from the Island but relocated to Grand Bois, if she still spent much time on the Island she replied, "I don't like to go. When I go it makes me lonesome."

People told me about what their community once looked like, filled with trees and land, but then oil companies dug canals, the intruding saltwater killed the trees, and the land eroded. The vast and rapid land loss created a sense of dislocation even for people who had stayed. For example, as Pierre described during a story circle, "I was about fifteen years old, sixteen...You could walk in the marsh then. Now there's nothing but water. Every time I pass on that [Island] road there I think about that. I look on both sides and say man, back in the old days, people used to walk over there on solid ground, solid marsh. And now there's nothing but water."

Theodore, who also lived on the Island, expressed similar feelings of dislocation. As I passed him one day in Pointe-au-Chien, he invited me on his oyster boat parked on Bayou Pointe-au-Chien. He pointed in both directions and said how much land there once was going both ways. He talked about where he used to oyster nearby; the canal used to be about 300-400 feet wide, but now it was about a mile wide. He pulled out his satellite radar device. His kind, playful eyes turned to me, the deep-set wrinkles crinkled in his leathered face. He showed me the surrounding places that used to be land and were now water, ponds that had become lakes. While the radar device showed one of the technological benefits of integration, it had become a necessary tool, as the places people navigated had rapidly changed and were harder to distinguish.

For people who spent their lives navigating coastal Louisiana's intricate web of waterways, as the water- and landscape changed, the land loss was not just physical but effected their sense of place and belonging. For example, as Donald described, "I used to get lost walking

in the trees behind my house. Now there's nothing. Bays and bayous were miles from home, now they're all around" (Coastal Louisiana Tribal Communities 2012). A sense of dislocation occurred as places people identified with and in which their memories occurred became unfamiliar. As we sat talking on his elevated porch, Jean, an elder from Isle de Jean Charles, described to me how they used to take pirogues (small, dugout boats) through the marsh between the Island and Pointe-au-Chien and the places they used to go, but "[n]ow it's hard to distinguish where those places are."

Often when I asked people about land loss, they told me why they thought it was happening and then, without my provoking, followed with a personal story of somewhere they used to go, a place that was special to them, where they would trap or garden, spend time together, keep animals, or pass by on their boats, and about how the place they were referring to was now gone or disappearing. For example, Madeleine, who relocated to Montegut from Pointe-au-Chien, told me about how when the oil companies started coming in and digging canals,

They didn't care about the land. Just kept bringing in water and washing off the sides...Like in front of our house, that was a little bayou you'd cross in a pirogue. We used to go down to shrimp...We used to go down there and that was a bayou going all the way to Lake Chien. That was a bayou, you had land on each side. They had camps on each side. And now it's just water. I wouldn't know how to get there because it's just water. It's just like a big old lake.

The local knowledge of place and ability to easily navigate was being lost as the water- and landscape where people were raised was drastically altered.

Similarly, as I passed through a wide-open canal south of Pointe-au-Chien on a boat with Theresa, she talked about the dense forest that used to cover both sides of the bayou. Looking out at the ghost forest of dead trees that now overwhelmed the landscape, she pointed out where her grandparents had lived, which was now rapidly eroding. Describing the scene in her digital story she wrote, "When I was growing up, my family would take the boat down the bayou and I could pull the grass on either side of the boat with my hands. Now it is just wide open canals. It was pretty here before. Now

all we have are skeletons."

As the places where people's



Figure 27. Places Where People Used to Live Farther South in Pointe-au-Chien. Source: Julie Koppel Maldonado, 2012.

memories were embedded washed away, a sense of dislocation, alienation, and uncertainty persisted about what this meant for the future of each tribe, their culture, and whether anything would be done in time to restore the land. One of the ways these feelings were most highlighted was through people's narratives about the loss of trees.

"If You Could Talk to That Tree It'd Probably Tell You a Few Stories"

"When I was growing up, there were trees all around. This piece of wood was cut from a tree I watched grow. I'm forty-seven years old and I remember seeing this tree being planted. It's a Chinese tallow tree. My cousin Virgil cut down the tree a couple years ago because it was dead and rotting. The trees that once provided shade and allowed us to sit outside are all gone. The land is so saturated with saltwater that the roots can't survive. There is so much saltwater it chokes them."

 Chris, Isle de Jean Charles Tribe of Biloxi-Chitimacha-Choctaw Indians, excerpt from digital story

When I went to Chris's house to talk about his digital story, he had put together an album

of pictures for us to go through together. The common theme was showing the trees that were

once on the Island, that were no longer there. When describing the changes in the landscape, one

of the most prominent issues most people raised was the loss of trees, which had been such an

integral part of the landscape and people's memories about their community. Chief Albert said

when we drove around the Island, "If you could talk to that tree it'd probably tell you a few

stories." Some of the people from Isle de Jean Charles highlighted the significance of the loss of

trees during a story circle when I asked them to describe what the landscape looked like when

they were growing up,

Renée: More trees!

Pierre: They had a lot of trees over here. A lot of trees. When we first built our house over here, in the back there we had to cut some trees over here. And then trees in the back. We had trees and trees. A lot of trees.

Maurice: On the other side too you couldn't even see like, you see all the water over there? You couldn't even see that because it was so full of trees.

Pierre: And you didn't have no water in those days though. Maurice: Didn't have no water, but you couldn't see through, all full of trees.



Figure 28. Behind Pierre's House That Used to be Filled with Trees; Signs of the Oil Industry in the Distance. Source: Julie Koppel Maldonado, 2012.

Even for many people who had relocated years before, the image of trees evoked memories about living in a place. For example, I asked Alphonse, an elder who lived in Golden Meadow, about fortyfive miles east of Pointe-au-Chien by road,

what Pointe-au-Chien looked like when he was growing up and some people lived a few miles farther south, which was now

under water. He described in French, which his daughter translated, "they had their camp, oak trees on each side, a lot, some that went over the water. They'd get in the shade, get their clothes and beat it on a tree trunk and soak it again. They had a lot of oak trees." Similarly, while I was out shrimping with Antoine, from Pointe-au-Chien, he described the changes from what the area looked like before and now, "like day and night. The trees used to line all the way to the Gulf."

The dead trees came to represent the degradation that occurred with the increasing impacts from so many disasters. For example, as Marlene described in her digital story, "It was

beautiful where we lived because all the trees were big and healthy. We'd sit under the trees and enjoy the fresh air the trees provided. We had a gumbo tree in the yard with roots that smelled like root beer that we'd use to make things, like filet. The tree died because of hurricane waters that came through."

Louis, who had relocated from Isle de Jean Charles to Houma a couple of decades prior expressed during an Isle de Jean Charles story circle at Pierre and Marie's house,

Look, this town here, when you walk in here now it's like a dead town, like a ghost. Just a little bit people that's still here. Back then, like I said, they had life. Where you look, they had nice trees, we used to play Tarzan right here, there was nice trees. And everywhere you go we played in, I used to stay here, me and my cousin we used to go play in the trees back [behind Pierre's house] and across, you know.

In Louis's narrative, the loss of trees not only represented the changes in the physical environment, but also the community, as well as demonstrating the integration into mainstream American society through references to popular culture. As the environment degraded, so too did the community (see also Burley 2010). Similarly, Burley found in his study of coastal Louisiana, land loss, and sense of place, "trees became part of the landscape that made up identity where the self and object became 'mentally intertwined'" (Burley 2010:62).

People often described the dead trees as ghost forests and the communities as skeletons. For example, with so few households left on the Island, Chris described what the Island now looked like in his digital story, "it's like the skeleton of the body." In addition to the images of death, ghosts, and skeletons that residents used to speak about the landscape and their communities, some female residents also used the metaphorical language of rape to convey the destruction occurring to both the physical environment and their communities. Theresa told a news crew while we were out on her and Donald's boat going down Bayou Pointe-au-Chien, "they've raped the land." Chief Shirell touched on a similar idea in her digital story when she
wrote, "They didn't rape Mother Earth; they have destroyed her and my people and our heritage with their lack of morality and common sense."

Other studies of environmental justice have also found the rape metaphor used, such as McNeil's study of the relationship between local activists, communities, and the coal mining industry in Appalachia. McNeil found that many residents equated mountaintop removal and the violation of the physical and social



Figure 29. Ghost Forest, Bayou Pointe-au-Chien. Source: Julie Koppel Maldonado, 2011.

landscape with rape (2011:2). Through the use of the rape metaphor, Theresa and Chief Shirell pointed to how harm was accrued through the state and oil industry's pursuit of resources and power, which is the root cause of environmental degradation (see also Warren 2001).

The dead trees dotting the landscape were reminders to people of what the landscape once looked like, what the community had been like, and what processes unfolded during the past few decades. For example, I stood with Victor at the house on Isle de Jean Charles that had been his brother's and where his family moved when he was younger from the end of the Island. Looking across the open water and at the oil industry's production from the deck of the raised house, he said, "We get a little check every month for that, but it's not worth, look what they've done to the, there was oak trees all over there. It's all gone."

Continuing our conversation, Victor and I drove to the south end of the Island where he grew up. He wanted to show me the tree that was there the last time he went down to the southern end of the Island. As we drove I asked him how long it had been since he had been to

the end of the Island, about a mile south of the house he had come back to clean up after his

brother passed away. He said,

I don't really care to go there anymore. But I want to bring my grandkids over there and take a picture of that tree...We used to live where that old cement slab is over there. That was the old cattle fence. That's the tree, oh shit! There's nothing left! That's the tree I'm talking about. My house was over there...Look, they still got a little piece of oak tree over there, it's gone, but yeah, they blocked this up. You'd have to wear boots to go in the back. That's the canal I was talking about. They put the oil well right there where the oak trees were at, on other side of the bayou.

We watched the sun set. He showed me where his family used to keep cattle. Back on the

elevated porch outside the house, Victor continued to look out across the landscape. I asked him

what it felt like being down there now. He said,

It's not the same. Like in the back over there, look at that, all you see is lake, you just had that bayou at one time and now all you see is lake in the back. See that line of trees there? You'd see trees all over. And the oil company kept on cutting and cutting. And the more you cut the more you sink. See like in Pointe-au-Chien over there, when they made that levee on the crossroad over there, daddy told...the police juror, he said you're all digging your own hole. When they made that they wanted to flood us down here. And instead of going out outside over there and making the levee, they would've protected everybody.

Transitioning from the loss of trees, to the oil industry chopping through the marsh to lay

pipelines for resource extraction, to feelings that

officials made flood protection decisions to specifically discount the Island, Victor evoked the economic and political structures that had caused the degradation of the environment, and how the loss of trees also came to symbolize the lack of flood protection and restoration activities in and around the community. Similarly, as Theresa,



Figure 30. View from Behind House Where I Stood with Victor, Isle de Jean Charles. Source: Julie Koppel Maldonado, 2012.

from Pointe-au-Chien, described during a cross-community conversation with a leader from Newtok, Alaska and a researcher working with the community of Newtok,

We've been after both parish presidents because we see land loss. And whenever they finish the last section at the end of the road of the levee, both parish presidents came. Donald went and talked to them and he told them about this tree that was still on land, but if they didn't put rocks there that tree would be in the water.

Both the president from Lafourche Parish and the president from Terrebonne Parish told Donald they had rocks to put there, but, as Theresa explained, "We're almost a year from that date he said that and there's still no rocks." Many people who had stayed and many who had relocated voiced the need to restore the land and preserve what was left because, as Chief Shirell said, "It's important, that's who I am, that's where I'm from."

Acknowledged Presence

One of the major challenges the tribes faced was the acknowledgment of their presence in the present. For example, in a meeting in New Orleans, I listened to Senator Landrieu discuss the importance of restoring the coast and she stated how Native Americans had been there many centuries before. Theresa, who was sitting next to me, whispered that there was no recognition the tribes were still here, referring to Senator Landrieu only speaking about the tribes in the past tense. In another instance, despite the U.S. Census Bureau hiring people from the communities to collect data for the 2010 Census, the 2010 American Indians and Alaska Natives U.S. Census map labeled the entire tribal population in Terrebonne and Lafourche Parishes as "United Houma Nation" (U.S. Census Bureau 2010a), ignoring the fact that there are five separate, state-recognized tribes in the two parishes, including the three tribes that are the focus of this dissertation.

Residents advocated for acknowledgment in the present in multiple ways. Tribal members attended public forums and meetings to show that there were still tribal communities

living down the bayous. For example, at a public meeting in Houma for Louisiana's 50-year Master Plan for a Sustainable Coast, Theresa stood up and said, "How do we know that our comments will be considered for real and not just to fit into your guidelines?" Standing there in front of the panel, in the middle of the crowded auditorium, she pushed back her long black hair, revealing the words written across her t-shirt, "Sure you can trust the government, just ask an Indian."

The tribal leaders also worked for their tribes to be acknowledged by seeking federal recognition. As Marlene described in her digital story, "We are trying to get federally recognized so we can maintain our community, our elders can be supported, and we can have our own schools back and our own education for our kids. I would give my life to see us federally recognized to show who we really are." Jack, an elder Cajun from Pointe-aux-Chenes, noted the injustice of Isle de Jean Charles being denied federal recognition, "If there's a Native American tribe in this state of Louisiana, Isle de Jean Charles should be federally recognized. Don't tell me that they're Native American and couldn't go to school, and then you're gonna tell them they're not Native American?"

Much of the communities' social memory was tied to being Indian enough to be discriminated against, but not federally recognized. And outside actors used the tribes' lack of federal recognition against them to continue to exploit their lands. For example, a lawsuit brought to the federal court in 1993 by the Pointe-au-Chien Indian Tribe to restore their rights to several hundred thousand acres of oil-rich lands fueled the Louisiana Land and Exploration oil company to cast doubt on the legitimacy of their rights, calling them "so-called" Indians (Miller 2004:201), as they were not federally recognized tribes. Continuing to pursue federal recognition for the past twenty years, many tribal members resisted a network of intersecting dominant

ideologies about belonging to a place that constrains, dominates and denies them cultural citizenship (Ong 1996). Such denial of citizenship is an act of violence and an assault on one's identity and sense of self. Faced with these challenges, a number of people from the three communities employed certain everyday practices and adaptation strategies to reinvigorate their culture and claims to place.

Reinvigorating Culture and Reclaiming Place

Tribal members were reinvigorating their cultural traditions, such as holding naming ceremonies, where some tribal members received their Indian name, and preserving their food and community traditions (Maldonado et al., in press). Continuing their food traditions, such as crab and shrimp boils, where everyone gets together to share their catch, cook, and eat communally, helped maintain their place attachment. The tribal leaders were re-introducing traditions, establishing new rituals, and re-learning what had been lost. For example, Paulette, who had relocated from Pointe-au-Chien to Bourg, explained, "I don't remember my grandpa and them drumming. I'm sure like maybe in the 17, 1800s they drummed, I'm sure. But from what I remember from like my grandpa and them, nobody drummed. I find that that part we had lost." Six tribal leaders from Isle de Jean Charles and Pointe-au-Chien formed a drum group a few years ago, having obtained the drum through a grant from the local Diocese. They practiced together and performed at activities such as naming ceremonies and the Native American Mass held every year in Pointe-aux-Chenes.

Cultural reinvigoration was exemplified during Pointe-au-Chien's week-long youth cultural camp during the summer; they had drumming, shawl making, basket weaving, drumming, beading, and storytelling. During the camp, the children helped their elders and the Pointe-au-Chien Tribal Council members finish building a traditional palmetto hut, replicating



Figure 31. Palmetto Hut, Pointe-au-Chien. Source: Julie Koppel Maldonado, 2012.

the type of house their ancestors lived in until the early 1900s. Members from Isle de Jean Charles helped people from Pointe-au-Chien gather palmetto from Grand Bois farther north to make the hut because there was hardly any palmetto left down the bayou due to the saltwater intrusion and land loss. However, the palmetto hut was damaged when

Hurricane Isaac hit less than two months after the hut was completed. It is easy to see how people could be discouraged to undertake such activities, knowing that the next storm could just take away their efforts. Therefore, part of the cultural reinvigoration seemed to be tied to claiming the cultural importance of being included in state-led restoration and flood protection activities and the accrued impacts from being discounted.

Besides lawsuits to reclaim their land, people also made personal claims to place. For example, in the annual Isle de Jean Charles Christmas Parade, as the parade went down the road and Santa passed out the donated gifts, many families who had relocated stood where their houses used to be, now empty spaces grown over with weeds, remnants of what recent hurricanes left behind.

The drive to reclaim their land ran deep in both present actions and memories. For example, sitting around their kitchen table one night, Theresa told me how a couple of older people from their tribe were arrested for trying to get their land back when canals were first being dredged for oil pipelines. However, Donald was not sure if the people were actually arrested or not. More important than whether or not the people were arrested was the perceived memory of events, the generational memory that the land was stolen and in fighting to get it back, their ancestors were persecuted. The tribal members held on to the memories of what their ancestors did to protect the land and waters from which they derived their livelihoods. For example, Donald and Nicholas both remembered the story that their grandfather was given a \$500 check from Wildlife and Fisheries after his land was taken from him, but he never cashed the check because he had not agreed to sell the land.

While talking about reclaiming land, Nicholas, from Pointe-au-Chien, noted, "If we get back land, it'll be for everybody. Hopefully one day it will happen. This land won't be there long, it's washing away quick." Despite the dislocation and alienation people experienced, through a shared, remembered past and attachment to place, people continued to claim their right to stay.

Decision to Stay

Living here is a commitment. You have to do it in spite of the challenges of storms, flooding, distance to everything. But the good outweighs the bad. When there are no storms, no flooding, raising the kids on the Island, that is the good. It's not everywhere that you can be outside your house with a nice breeze in comfort and safety knowing everyone around you. What it was, what it is, that's what keeps me here.

 Chris, Isle de Jean Charles Tribe of Biloxi-Chitimacha-Choctaw Indians, excerpt from digital story, 2012.

Walking near our apartment in Houma, I started chatting with a woman who lived nearby. She told me how there were still Indians down the bayou and was amazed how they just stayed there and did not leave, especially people from Isle de Jean Charles. She said how they refused to leave, but really needed to move. She was on the Island many years ago and could not believe the condition of the houses, just rubble. How could they stay?

While many people had relocated, others refused to leave despite the continued struggle with insurance companies, the parish, and the Federal Emergency Management Agency (FEMA), which was established in 1979 to respond to disasters occurring in the United States, to replace what residents lost after each storm. For example, Rebecca told me that she still had not received anything from losing her house in 2008 to Hurricane Gustav. Then, when the trailer she lived in with her daughter and grandchildren was flooded from Tropical Storm Lee in 2011, causing a giant hole in the middle of the floor through which the ground was still visible, she did not receive any support. If people were unable to elevate their houses, they often flooded with each storm that hit. Yet, they stayed.

Many people told me that they stayed because this was where their way of life was and they could not practice the same fishing traditions if they moved into the city. Some of the older people had spent their whole lives working on boats, and especially for those who could not read or write, it would be too hard for them to do something else. Some people stayed because they did not have the funds to relocate. But it was about more than not being able to afford to move. For example, sitting around the table with a family from Isle de Jean Charles, the adults told me how the Island was where they had a place to live and if they moved to town they would have to pay rent and they could not afford that. But beyond that, this was home. The male head of household told me about how he built the house, how he had always lived here, grew up in the lot next door, and he was not going anywhere. People stayed because of their ancestral ties. As Theresa wrote in her digital story, "This life is not an easy one, but I would not change my life because my roots are here in Pointe-Aux-Chenes. My grandfather, dad, and mom were born below the Cut Off Canal. Some of my ancestors are buried down the bayou and if it were permitted I would be buried down here instead of up the bayou."

Residents of Pointe-au-Chien talked about how people always came back after storms and not wanting to leave because they liked the close-knit community, so they just kept rebuilding their houses higher. Theresa told me how one family in Pointe-au-Chien even slept on

wet mattresses after their house had been condemned following a storm. When I asked Madeleine, who was from Pointe-au-Chien and now lived in Montegut, what she thought about the tribe's future down the bayou she said, "Oh, the tribe's not going anywhere. Some of them's going back. I've heard quite a few of them saying they're going back to Pointe-au-Chien."

For some, the importance of staying was directly tied to their cultural identity, livelihoods, and sense of belonging, despite the discrimination. For example, as Nicholas, from Pointe-au-Chien, described, "I feel like we got cheated and mistreated and used and abused and reused. I went to Alaska, it's too cold there. Went to Washington in the summer, there was a heat wave and that was too hot. Over here you get in the shade and you got breeze and it's nice. For me, being Native, they've been down here for years. They might've gotten chased down the bayous, but they made their living on the bayous. Hopefully it's gonna get better."

Similarly, despite the challenges of living on the Island, Chris felt it was worth it because it had always been home for him and his family and he was connected to the land. Pierre, who was a World War II veteran, echoed a similar sentiment when I asked him, over coffee on his porch, why it was important to stay on the Island, "I was born and raised over here that's why I live here. I've been all over the world and I came back here." And as Renée, who a few minutes prior had walked across the road and up the steps to Pierre and Marie's porch for coffee hour, said, "I stay because I just love to be outside and not crowded. And look out. Well now I like to look out at the water. And watch the sunset and the sunrise. Can't see that in town. And you're all crowded. And everybody's on top of another. And that's why I'm going to stay as long as I can."

During my conversation with Regina and Charles in their trailer on the Island, Regina said that she stayed because "I live here. I live here. All the more reason I have to fight for

here...the tribe needs to stay here, this is the tribe. We need to work on beautifying it here and

keeping it up here...This is where they grew up here. This is where they were born here. This is

where the tribe is." Regina said that in Bourg it would not be the same because they would lose

their place and traditions.

Regina: But if push comes to shove you've got to go. You don't want to stay and drown. But as long as we can hang in there and stay put and live here and fight for it and keep fighting for it, you can survive...And the pretty place, it's not a pretty place anymore. To us it's still livable because we remember, we have the thoughts. We can go back and reminisce about what it was like...We thought about moving, but it costs money to move. You can't just think, I'm gonna move. And you got to up and collect money...And we don't wanna go and start all over again for another house. We're not at the age where we can pay another house. We want to make sure that where we're at is where we stay. But there's no guarantees now. Julie: Is it more the finances that keeps you here?

Julie: Is it more the finances that keeps you here?

Regina: I don't think so. I think if push comes to shove, we would go. I think we could find the finances. But it's the idea we don't want to move from here. Where are we going to go? Where are we going to find a place where we're adaptable to that place? Where it's going to feel at home?

Julie: What is it about here?

Charles: Fishing and all that...I've been born and raised and this is where I learned the skill of fishing and oysters and all that, with my dad. Shrimping we used to do at one o'clock in the morning. We'd go by that lake over there, Lake Chien. Make a little light. Catch the shrimp. We'd catch more fish and more shrimp. I thought that was my dream. When he started bringing me, I couldn't sleep at night. I was waiting to get in the pirogue and go and catch that fish. We had a buyer that bought the shrimp and oysters. We'd gut the fish and in those days they didn't have no limits on fish. I've been raised like this. It would really be hard for me to move. It's not that I wouldn't. If I do move, I would need a place

Regina: It would need to be the bayouside.

Charles: A place where I could come fishing and hunting not too far.

Regina: He don't even like to think about moving.

Voicing their concerns about relocating, Regina and Charles talked about the importance

of staying because of the memories they had that tied them to the land. While Regina discussed

the financial concern if they had to relocate, this was secondary to place attachment, particularly

through memories of their livelihood. While being adamant about staying, they also showed

awareness about the possibility of having to relocate and the distinct tensions felt in such decision-making.

Conclusion

People's place attachment stems from both their own experiences and multi-generational knowledge of the physical environment in which they carry out their livelihoods and cultural practices and in which their memories, narratives, and stories told over generations come to life. The loss of place – placelessness – is not a tangible element that can be quantified and compensated. The environmental changes and loss of place signal a severance with not just past generations, but a loss of cultural identity and practice for future generations. Through the intense environmental degradation and destruction of known landscape from which they derived their livelihoods, many residents across coastal Louisiana experienced placelessness that came from "loss of a group's cultural space and identity" (Cernea 1999:17; also Mahapatra 1999:194).

The sense of dislocation that many people experienced while still dwelling in place can be understood through the concept of "solastalgia," which is "the distress that is produced by environmental change impacting on people while they are directly connected to their home environment" (Albrecht et al. 2007). In short, solastalgia is "a type of homesickness one gets when one is still 'at home'" (Connor et al. 2004:55). As many residents from the three tribes experienced the on-going environmental changes, they exhibited feelings of solastalgia through a sense of dislocation and alienation from their subsistence-based activities, local, traditional knowledge, and memories.

People's memories are part of their community's narrative, which is shaped by their connection to place and the inclusion, belonging, and connectedness to the past in that place, as well as the past that directed them to live in that place (Basso 1996:146). Thus, the communities'

social memory was not just of their current geographic location, but also the story of how their ancestors came to be there.

When I asked people about their own personal experiences, especially related to relocation, many people responded in relation to past events that had happened to their ancestors. This seemed to be most true for the tribes' leaders, who had been working to obtain federal recognition for over twenty years, which included demonstrating their ancestors' migration to the area. Working to refute mistakes publicized about their tribes' histories, as discussed in chapter two, a number of people I spoke with dicussed their own experiences of relocation in the context of their ancestors' movement down the bayous, demonstrating how social memories can be used as political tools where the lines of social memory and history become blurred (Golden 2005:271-2). The structural violence of the tribes' past displacement and relocation continued to play out in people's lives through environmental degradation, resource extraction, and socially constructed vulnerability to disasters. Claiming places down the bayou as their own where the tribes' ancestors had relocated highlights how the tribes have created a place to identify with and to which they have given meaning to through past experiences.

Many tribal members with whom I spoke also related past events and injuries to current experiences and the lack of flood protection and restoration actions being taken to protect their communities, as will be discussed in the next chapter. Considering people's attachment to place, and feelings of dislocation while still physically in place, is important for understanding what it means for the communities to face forced displacement and conceptualize community-scale relocation.

CHAPTER 7

"IT WAS LIKE PARADISE": RELOCATION AS ADAPTATION?

To the state, our ancestral home is not worth saving. We are a disposable people, land loss, erosion, and saltwater intrusion help them to gain more waters and, future locations for the formation of oil...

Our children, like me, will not know the blessing of being surrounded and cared for daily by loving ancestors. Their traditions and culture will be forever lost, the trees and waters they once enjoyed as playgrounds will be gone, replaced, with the white man's ways of asphalt and buildings and the darkness that comes with it. Replaced with a desire for more than one needs. They will hear the drum of their heartbeat and search for home but they will not find it. Home will forever be an unreachable destination.

Separation and relocation a good thing? I can definitely say NOT. One can be separated from their people and their lands, but the heart always knows and calls one HOME.

 Babs, Isle de Jean Charles Tribe of Biloxi-Chitimacha-Choctaw Indians, excerpt from digital story, 2012.

Marlene, who had relocated to Bourg, approximately fifteen miles northeast of Dulac,

and I drove slowly up and down the bayou running alongside Dulac. We passed where she grew up and got out of the car. I took a picture of her looking into the camera with her hand pointed back to display the now empty lot along the bayou where her house once stood, a dead tree with its ghostlike limbs rising up behind her and the area where her dad grew gardens now covered with weeds. I asked her if she would ever move back here. She said absolutely if it could be saved.

While many people who had relocated voiced the desire to move back, they did not see it as feasible because their communities were not going to be included in hurricane protection systems, they would have to worry about flooding every hurricane season, and flood insurance rates were too high. Serena, who now lived in Bourg after growing up in Montegut, where her family moved to from Pointe-au-Chien after flooding from Hurricane Juan in 1985, explained, "It's not if it's going to happen, it's when. Because basically at least once a year or every other year they're going to have some type of flooding, whether it's a tropical storm or a bad rainstorm, they're going to get it." A number of people felt that unless something was done to protect the communities from storms from the south, the land in and around their communities would soon all be gone. For example, during a story circle on the Island, I showed the participants two aerial maps showing land mass around the Island from the 1950s and 2011. Looking at the two maps, Pierre said,

I saw the map gonna happen in 2050. See the Island over here, just gonna be no more than a little dot with a pencil, Pointe-au-Chien ain't gonna have nothin' left over there either. Montegut just lil' dot lil' bigger than the Island...And then that part and Dulac and all, Dulac gonna be gone, and west of Houma...All of those parts, that marsh land, that's gonna be all water. That's the map in 2050.

The map in Louisiana's 50-year Master Plan for a Sustainable Coast, which Pierre was referring to, showed that without restoration or flood protection measures, all of the land in and around the tribal communities would be gone by 2050.

This chapter focuses on the political and economic structures that determined the communities' inclusion or exclusion in government-led restoration and flood protection decisions based on cost-benefit analysis. This chapter also focuses on the everyday strategies the tribes employed to be included in hurricane protection systems, maintain their communities and culture, be counted as citizens, and acknowledged as Natives. It highlights the proactive measures some residents took to adapt to environmental change in place, why some people had decided to relocate, and steps taken by the Isle de Jean Charles Tribal Council towards community-led relocation.

Environmental Injustice and Cost-benefit Analysis

Despite state reports concluding that if restoration and flood protection actions are not taken the tribes' lands would be gone before 2050 (CPRA 2012), the three tribal communities have thus far been mostly left out of government-led restoration and flood protection plans. For example, Isle de Jean Charles was included in the original Morganza-to-the-Gulf of Mexico

Hurricane Protection System, a flood control project conceptualized by the US Army Corps of Engineers, the Louisiana Department of Transportation and Development, and the Terrebonne Levee and Conservation District. However, the community was cut out of the plan in 1998 because they were told by the USACE that it was not cost-efficient to include them (USACE et al. 2013b). The USACE decided it was more economically feasible to relocate the people from Isle de Jean Charles than include them in the levee protection system (USACE et al. 2013b). However, without understanding the local and internal politics, the relocation plan fell apart.

> Morganza-to-the-Gulf of Mexico Hurricane Protection System

The Morganza project was proposed to reduce hurricane and storm damage in coastal Louisiana, including parts of Terrebonne and Lafourche Parishes. For the planning stage of the project, decisions made on which communities to include in the protection system were in large part based on Executive Order 12866, which states,

In deciding whether and how to regulate, agencies should assess all costs and benefits of available regulatory alternatives, including the alternative of not regulating. Costs and benefits shall be understood to include both quantifiable measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits that are difficult to quantify, but nevertheless essential to consider (White House 1993).

While progress has been made to include some long-term environmental and social costs into cost-benefit analysis (CBA), the process that federal agencies must follow according to Executive Order 12866 often underestimates the actual costs, such as loss of livelihood and cultural heritage, and, in the case of the Morganza project, appeared to skew the benefit in favor of large-scale industry, such as multinational oil and gas corporations and the shipping industry, whose assets were included in the Morganza Protection System plans.

One of the major problems with the Morganza project is that the federal and state government does not consider flood and hurricane protection measures within a unified water system, but rather does so piecemeal, which has been a problem since the nineteenth century. For example, in 1981, President Reagan's administration "provided no funds for the Water Resources Council and abolished the river basin commissions" (Galloway 2006a:47). By the end of the 1980s, after thirty years of primary attention to economic cost-benefit analysis and lack of comprehensive planning, individual projects that met the national economic development test became the exclusive focus. Between 1965-2005, levels of protection provided by new projects in the flood-control area "were designed less to protect against the large events envisioned in the 1930s than to provide the most favorable benefit-cost ratios; little consideration was given to the non-quantifiable social and human safety costs of the lack of protection" (Galloway 2006a:47). When Congress approved its water resources bill in 2012, Louisiana's \$13 billion, ninety-eightmile Morganza Hurricane Protection System was left out, even though the USACE had already approved the project earlier in the year (Reckdahl 2012). After twenty years of discussions and deliberations, while federal funding was yet to come, state and local funds were being used to construct segments of the project prior to the Federal project implementation (USACE et al. 2013a, 2013b). For example, the Terrebonne Levee and Conservation District (TLCD) levied an increase in local parish sales tax to locally build parts of the Morganza Protection System (Terrebonne Parish Consolidated Government 2013).

According to the Morganza Revised Programmatic Environmental Impact Statement, one of the indirect impacts of the project construction was "the potential to raise water levels in several communities located outside the levees by several feet during storm events. Present day surges of 7 to 10 ft could increase by as much as 3 to 7 ft more than the sea level rise increase in the future" (USACE et al. 2013b:8; also USACE et al. 2013a). These areas include all of Isle de Jean Charles and Cocodrie and portions of Dulac, Gibson and Bayou Dularge (USACE et al.

2013a, 2013b).

The Morganza Environmental Impact Statement acknowledged that leaving Isle de Jean Charles out of the proposed levee alignment and likely induced flooding during storm events when the protection system is closed is a potential environmental justice issue. The same was also true for the southern portion of Dulac excluded from the protection system. However, the Environmental Impact Statement went on to state, "Providing hurricane risk reduction for Isle de Jean Charles has been determined in previous Corps of Engineers analyses to be cost prohibitive" (USACE et al. 2013b:5.53). A preliminary nonstructural plan was developed to prevent increased risk to people and structures that were located in high-risk flood areas. The Environmental Impact Statement reported that impacts to the communities left out of the system "would be mitigated through 100% buyout and uniform relocation assistance" (USACE et al. 2013b:6.45). If the worst-case scenario proved to be the mitigation method employed, this would mean approximately 2,500 people would need to be relocated (USACE et al. 2013b.).

The Post Authorization Change Report, which sought re-authorization of the Morganza project after exceeding the twenty percent cost increase limit of the project after Hurricane Katrina's damage to New Orleans' hurricane levees, stated that Isle de Jean Charles was:

an isolated community of State-recognized Biloxi-Chitimacha tribe members that has lost a significant percentage of its population in the past 10 years. There are currently about 25 families using the 'Island' as their primary residence. The majority of the remaining structures are weekend camps. Most of the residential structures are already elevated. The 2002 feasibility report determined that a relocation plan was economically justified; however, it was not recommended because the proposed plan was not supported by the Isle de Jean Charles community. Instead, the TLCD constructed an earthen levee to approximately elevation 6 ft. In addition, the only road to the island was raised to provide a better evacuation route (USACE et al. 2013a:30).

While Isle de Jean Charles did receive some support through road elevation and the earthen levee, referred to by residents as the ring levee, problems with both projects ensued, as

discussed in detail below. The above description provided no indication of why so many tribal members had to relocate in recent years and there were only twenty-five families still living on the Island. Describing the twenty-five families as "using the 'Island' as their primary residence" separated people's lifeways and livelihoods from the water- and landscape in which they are intricately embedded. Such a description does not account for people's subsistence and cultural ties to the land and social networks. Also, the description provided no context for why the proposed relocation plan in 2002 fell through, such as the USACE counting non-residents and members of another tribe in the vote when determining if the Isle de Jean Charles community would be offered relocation. Furthermore, while the earthen ring levee constructed by the TLCD has helped prevent flooding during high tide since, several residents told me that the levee was not built appropriately and its placement was chosen more to protect a Louisiana Wildlife and Fisheries area. Residents also explained that the road was not elevated high enough and would continue to flood and break apart if it was not raised higher.

The Post Authorization Change Report's Environmental Justice Appendix stated,

When identifying and developing potential mitigation measures to address environmental justice concerns, members of the affected communities would be consulted. Enhanced public participation efforts would also be conducted to ensure that effective mitigation measures are identified and that the effects of any potential mitigation measures are fully analyzed and compared (USACE et al. 2013a, Appendix J).

However, such actions were previously suggested and not followed through upon, such as when USACE representatives did not listen to elders from the Island about where to find an appropriate ridge on which to build a levee, as discussed in detail further in this chapter.

Under Title II of the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, which is applicable for the Morganza project, "displaced persons are entitled to reimbursement for actual and reasonable moving of personal property, differential housing payment, and incidental costs associated with the relocation" (USACE et al. 2013c). However, such a plan does not include in its compensation package loss of livelihoods or other social and cultural losses, such as loss of social networks, attachment to place, traditional knowledge, or cultural heritage, which social scientists have documented as consequences of development-caused force displacement and resettlement, as discussed in chapter five. Furthermore, there could be issues with legal documentation to show official property ownership, as residents have passed property down over generations, which can happen informally and not take place under a westernized legal system. The Real Estate Plan also focused on individual relocation, as opposed to the community-based relocation that the leaders of Isle de Jean Charles were working towards, as discussed below.

The Project Delivery Team for the Post Authorization Change Report determined, "oil and gas wells will not be relocation items, and the levee alignment would be changed, or T-walls used, during the project Plans and Specifications (P&S) phase to avoid them" (USACE et al. 2013c:20). Therefore, while the project planners could envision a plan that displaces people and entire communities, they could not envision or implement a plan that would impact oil and gas wells and would even re-align the levee system if such a need arose. As one Island resident stated in a newspaper report, "There's a hidden agenda, and it's going to come out…There's a lot of oil in this area. They're just waiting for people to move out" (Stuart 2002). Based on a multicentury history of displacements and relocations, a number of residents felt that the government wanted residents to relocate so the oil industry could have free range over the area without interference.

Memories of Land Grabs and Previous Removals

Jerome Zeringue, the former Director of the Terrebonne Levee and Conservation District and current Executive Director of the Coastal Protection and Restoration Authority, explained to me that Isle de Jean Charles could not be included in the Morganza System because "the costbenefit to do it is not there." Instead, the USACE offered relocation as an alternative. However, according to him, some people said they did not want to leave because they thought that Big Brother was going to take their land and drill for oil. The USACE representatives missed the underlying issues and context within which they were working. Individuals from the tribes grew up either with the experiences themselves or with the stories of multinational oil and gas corporations and land developers coming in and taking their tribal and family lands. So there was a justified fear that a similar situation was happening again.

Many residents feared that the government was using environmental change, such as relative sea level rise, as an excuse to move people out of harm's way to develop desired coastlines for tourists and outside wealthy elites. Several times people discussed rumors about outside developers moving in to buy up the land, forcing the local people to move. A similar situation was happening for communities around the world impacted by disasters. For example, after the 2004 Indian Ocean tsunami hit, the Maldives' government announced that residents needed to move to one of five islands designated as safe zones, thus clearing entire areas for tourism (Klein 2007:505, 507). The Maldives' government saw the land along the beach where local villagers lived as being more profitable if put to use for tourism, instead of the fishing that maintained the lives of the local villagers (Klein 2007; Reed 2008).

Several residents from the three tribal communities voiced a similar fear. For example, Chris felt that if the residents left the Island, some developer would just come in and take the place over. Similarly, when I asked Greg, who had relocated from Dulac north about ten miles to

southern Houma, if he felt other impacts besides storms and flooding when he was living in Dulac, he responded,

Well, I guess you could say our rights. Because they don't wanna recognize us because this is a shipping port or a shipping lane for the oil field company and if they do that, then we don't make money off of them passing through, they don't wanna do that. Cuz from way back when...Trail of Tears...Yeah, when they did that, this isn't your property, get outa here!

The present environmental injustice evoked the memory of previous removals. As discussed in the previous chapter, people's social memories worked to make sense of the present context through memories of past events and experiences.

Failed Options for Relocation

Chief Albert explained to me that Isle de Jean Charles was included in the original Morganza plans but was taken out in 1998 because "they said the cost-ratio wasn't there and now it's even worse." The USACE former Morganza project manager, Rodney Greenup, explained to me that the hardest part about the decisions that went into the Morganza project was "talking to locals like Isle de Jean Charles that can see the levee but can't participate." The community was cut out of the hurricane protection system because the "economics just aren't there." The USACE was "federally allowed to flood some [communities] and protect others," they just needed to "justify the cost to save one community over another."

Because there was no government support to mitigate the flooding and restore the land, the Isle de Jean Charles Tribal Council said they would like relocation assistance for their people, but as a community. The USACE worked with them to identify a site nearby where the community could rebuild. The USACE hired architects for the relocation proposal, with the idea of maintaining a cohesive community. But, as Rodney Greenup, the former USACE project manager, explained it, when it came time to vote, the majority of people from Isle de Jean

Charles did not want to relocate. However, Chief Albert described how it was people outside the Isle de Jean Charles Tribe who stopped the vote at the meeting and prevented reaching a consensus. There was a lack of understanding by the government authorities on the local tribal politics in the area. The USACE representatives and others involved failed to recognize the socio-historical context and sensitive nature of government representatives raising ideas about relocating a tribal community.

Rodney told me about the first time he went to the Island, how driving across the Island Road felt like going to the end of the world. He met with residents at the fire station on Isle de Jean Charles to discuss the relocation plan. Jerome Zeringue, the Director of the TLCD at the time, was also there and described to me how people started yelling about the Trail of Tears. Henri described the meetings and what he said to the agency representatives,

The only thing you're doing, you're re-living the Trail of Tears. He said, the Trail of Tears, what's that? I say you got a college education and you don't know what the Trail of Tears is?...I said all you've done, you're gonna build this levee right there and we're gonna have a strong hurricane with tidal surge. I say it's gonna come and wash our people to the levee...So I said what you're doing instead of leaving us on the wayside, you're just dragging us out to sea.

Jerome explained to me that the reconnaissance for Morganza started in '92 and feasibility started in '95. The project would protect over ninety percent of Terrebonne and Lafourche Parishes. The only real tweaks made in the plan were no longer including Isle de Jean Charles and lower Dularge because of CBA. Chief Albert described going to a USACE meeting in Bayou Dularge after Isle de Jean Charles was cut out of the Morganza System. He was told by the USACE representatives that "the realignment was probably not going to be done because they said there's a soft spot from over there where they surveyed at, but there wasn't a soft spot. So they told us if we could find the ridge they would reconsider. So we went and showed them where the ridge was." Henri told me how people came down to take soil samples for the

Morganza project to look for a ridge on which to build the levee,

If they had listened to the elders and went where they said, they would've found a ridge because there's a ridge that runs up through there. They said after doing a soil sample, cost-ratio it wasn't worth it. But if you go from Point A to Point B in a straight line look like it would be cheaper. So they were gonna leave the Island out. So they added twenty-one miles more to the levee, leaving us out...if they'd listened to the old people they would've found what they was looking for.

When I asked Jean, from Isle de Jean Charles, about what happened with the Morganza

project he told me that he wrote to the officials and told them,

If you come from Lower Terrebonne, it's almost a straight line could come and build a levee and take the Island and go connect with the Lafourche levee system and you could save miles and miles and miles of marshes, but they said it would cost too much. The soil would not be able to sustain a levee, so they moved it to close to Pointe-au-Chien over there and we're left out. But at least they gave us a ring levee.

While the earthen ring levee around the Island kept some flooding out of people's yards

on the Island, many felt that it was really put there to protect Louisiana Wildlife and Fisheries'

land on the north side of the Island. As Joseph, who relocated from the Island to Pointe-aux-

Chenes, explained, "Levee in back and parish came in on other side, supposed to be a protection

levee but they built it on the wrong side." Regina echoed Joseph's sentiment, saying how the ring



Figure 32. Ring Levee, Isle de Jean Charles. Source: Julie Koppel Maldonado, 2012.

levee for Isle de Jean Charles "should've been put behind us instead of out front. Why is it leaving us out?"

Jack, a Cajun elder from upper Pointeaux-Chenes, told me that when he was on the Terrebonne Parish Council he tried to fight the USACE cutting Isle de Jean Charles out of Morganza, "I said how in the world you can put a cost-ratio on sentimental value? People is buried there. I said how much your place where your family is buried, how much is it worth to you? You tell me."

In 2009, Chief Albert spoke at a Terrebonne Parish Council meeting about relocation, but after less than five minutes the Council cut him off (Houma Today 2009). A woman from the Parish Council stood up and raised the issue of property values decreasing if the community moved to Bourg, where there was a property the Isle de Jean Charles Tribal Council was considering trying to raise funds to purchase. Theresa, from Pointe-au-Chien, described how the woman stood up and said what would happen to the property value if "those people" moved in. Theresa emphasized "those," her eyebrows rose up, and the corners of her mouth turned up in an almost laugh at the remark.

Systemic Exclusion

The communities' ability to demand inclusion in hurricane protection systems and coastal restoration efforts was further limited because of their lack of federal recognition (Katz 2003). For example, several residents voiced concern that the tribes' ceremonial mounds and burial grounds would be lost if the areas were not included in state- and federally-funded restoration efforts. According to the Native American Graves Protection and Repatriation Act of 1990 (National Park Service 1990), which includes protection of Native American graves, an Indian tribe is defined as "any tribe, band, nation, or other organized group or community of Indians, including any Alaska Native village...which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians." This discounted the three tribes because, despite the Bureau of Indian Affairs recognizing their Indian ancestry, they had thus far been denied federal recognition. The National Historic Preservation

Act of 1966 (Advisory Council on Historic Preservation 2008), which calls to "establish a program and promulgate regulations to assist Indian tribes in preserving their particular historic properties" also used the same definition for an Indian tribe, thus discounting the three tribes as well.

Besides the Morganza project, the communities were given minimal attention in Louisiana's 50-year Master Plan for a Sustainable Coast. The Master Plan, which was released in 2012 by Louisiana's Coastal Protection and Restoration Authority (CPRA), in partnership with federal, state, and local governments, including levee districts, outlines what restoration and flood protection projects would be implemented for coastal Louisiana (CPRA 2012). The Plan proclaimed to value cultural heritage within its cost-benefit analysis (CPRA 2012), but yet it mostly discounted the three tribal communities. For example, representatives from the tribes were invited to attend a community focus group meeting at the CPRA office in Baton Rouge. Chief Shirell flipped through the Plan's Appendix I on Cultural Heritage and asked the CPRA representatives why the whole area where her community and the other tribes were located was marked as "H" to signify "Houma," another tribe in the area. Despite being state-recognized, their individual identities as distinct tribes were completely overlooked. While the CPRA added two focus groups – community and landowners – to their planning process, this was only done after Louisiana's 50-year Master Plan for a Sustainable Coast was created, determining which projects would be implemented, with the support of three other focus groups – the oil and gas, commercial seafood, and navigation industries. Individuals working for agencies such as the CPRA might be well intended, but local residents continued to be placed after the interests of the major economic industries in the region.

Determining the Greater Common Good

Cost-benefit analysis used to make coastal restoration and flood protection decisions does not account for what was actually lost in weighing the costs versus benefits. It does not include the costs of what it means when fishing families are moved inland and they need to seek other means of employment and learn new skills. It does not account for the local knowledge that is lost and cannot be replaced by moving a fisher to other waters or for the mental wellbeing of being removed from the only way of life one has ever known. While some social costs can be quantified, such as the loss of jobs, others are more difficult to measure, such as the loss of livelihoods and social networks and the meaning of cultural sites. For example, if the Morganza levee system is not built farther south, the tribes will lose their cemeteries and sacred mounds that their ancestors built. Although it can be challenging to take some of the less tangible aspects into account, "unmeasurable' should not become 'unforgettable'" (Cernea 1999:20). Legitimizing the injury done to some through claims of a more universal benefit, CBA is deficient, as it accounts for neither the distribution of costs and benefits nor important nonmarket social and cultural factors, such as people's identity, beliefs, and traditions (Cernea 2000:3671, 2008:7, 38-9; Fernandes 2008:199-201; Mayo 2010; Oliver-Smith 2010:142-149, 161; Safdie 2007:162-3).

The cost-benefit based restoration and flood protection decisions, which are legitimized by government authorities, need to be critically scrutinized, as they dictate and determine who is being sacrificed for the greater common good (Roy 1999). But the concept of "good" is predominantly based on economic measures (Oliver-Smith 2010:142-3). By assessing what restoration efforts are needed and implementing such plans based on CBA, Westman found, in an analysis of impact assessment documents for Canada's Alberta tar sands, that at "the root of these discussions lie differentials in power: power to tell the story of the future and then to enact it" (2013:112). The political and economic structures determining who is and is not included in restoration and flood protection projects led to what I call "restoration frustration."

Restoration Frustration

Much like the toxic frustration many residents experienced, they were also experiencing restoration frustration caused by authority figures in power to authorize who was included in restoration and flood protection activities. The snail-like pace of restoration added to residents' frustration and sense of anxiety if anything would be done before the land in and around their communities was completely gone. For example, Chairman Chuckie told me that he was reading a newspaper article about how the parishes could get money to fight erosion. However, he felt this was meaningless because the same thing had been said for years and the money was just used for studies. "Same thing for fifty years and nothing to show for it," he said. Disempowered and cut-off from the restoration process, people's sense of dislocation and alienation increased as they continued to watch the lands around them disappear.

Sitting together in the living room of an elevated house of an elder from Grand Caillou/Dulac, Chief Shirell and Marlene discussed how much money and time was being wasted on so many studies being done without action,

Shirell: The next Master Plan won't be put out until 2017. Five more years of studying. They're wasting valuable dollars. They've wasted so much money that could've been used to fix.
Marlene: They need to bring people out of the desert and show them what's going on down here. They know nothing about this.
Shirell: It's in the book somewhere.
Marlene: That's where they fail. But somebody's getting the back pocket in the process.
Shirell: Uh huh, that's it.

People often talked about not having faith in hurricane protection systems being built or about the need to pray for restoration for their land and their people, as they did not see restoration actions coming from the state or other agencies. People who controlled the restoration process (e.g., government agencies) and those who owned the means of production (e.g., oil and gas corporations, large-scale commercial fishing companies) excluded the local residents from the process. For example, one afternoon Theodore talked about how restoration efforts taking place along the coast were about getting money in politician's pockets. Chris described how the process often works, by supplies for restoration efforts coming from companies that local politicians have connections to, "Just look at the gravel out there on the Island Road, it was probably shipped in from somewhere in Texas where some politicians' brother owns the place that sells it and gets the money."

During a story circle at Pierre and Marie's house, I asked a few people from Isle de Jean Charles, some of whom had already relocated, if they thought people would be able to stay on the Island or if the community would need to relocate. Talking about state-led restoration plans for the area, predominantly based around Houma, the industrial hub about thirty miles north of the Island, they said,

Maurice: Well, I don't think they can save the Island.
Louis: They don't want to save the Island, they could if they wanted to.
Pierre: They could, but they don't want to...
Maurice: The levee's gonna pass south of Houma, you know where the Ranch Road is, the levee's gonna be right south of there. They started on it already.
Louis: So they're drowning everything below.
Maurice: South.
Louis: They're drowning everything south of that.
Pierre: South of Houma, yeah.
Louis: I would call that discrimination.

With the loss of land and barrier islands, there was no hurricane protection anymore; many residents felt that the communities themselves had become the protection for cities and industrial hubs farther north. It appeared that their exclusion from state-led flood protection and restoration efforts would continue as funds from the Resources and Ecosystems Sustainability, Tourist Opportunities and Revived Economies of the Gulf Coast States (RESTORE) Act (U.S. Department of the Treasury 2012) were distributed. The RESTORE Act requires eighty percent of the Clean Water Act penalties paid by the parties responsible for the 2010 BP Deepwater Horizon Disaster to go towards Gulf Coast restoration. However, the state of Louisiana had dedicated all RESTORE Act funds to be spent on projects contained within Louisiana's 50-year Master Plan for a Sustainable Coast, which had mostly left out the three tribal communities, but did include some hurricane protection measures for Pointe-au-Chien and parts of Grand Caillou and Dulac.

Furthermore, the Gulf Coast Ecosystem Restoration Council "recognizes the value of tribal input in the region's restoration activities" (Gulf Coast Ecosystem Restoration Council 2013:1). The plan to restore the Gulf Coast pointed to Presidential Executive Order 13554, which stated that the Gulf Coast Ecosystem Restoration Task Force might include representatives from tribes affected by the BP Deepwater Horizon Disaster. However, the Executive Order defined affected tribes as "any Indian tribe, band, nation, pueblo, village, or community that the Secretary of the Interior acknowledges to exist as an Indian tribe as defined in the Federally Recognized Tribe List Act of 1994 (25 U.S.C. 479a(2)), physically located in a Gulf State" (White House 2010). Without federal recognition, this definition excluded the three tribes.

Residents voiced frustration in the restoration process by feeling there was nothing that could be done, but also expressed resistance in being denied access to the process. For example, I spent the night before a public hearing about the draft 50-year Master Plan for a Sustainable Coast with Donald and Theresa. We sat around their kitchen table with maps of the area spread out. Donald spoke softly as his hands swept across the map from 2007 and he said how much land had been lost even since then. He then looked over at the map from the 1950s and said quietly, referring to the oil corporations, "they wrecked it all…all this is gone because of the oil."

I asked him if he was going to the public hearing in Houma about the Master Plan the following night. He did not see the point in going, as he felt the state authorities would not listen, having ignored what residents had been saying for years about the environmental changes and needs for restoration. Many residents believed the state wanted the communities to move to make way for unimpeded oil exploration and commercial development, so did not see the state listening to their restoration needs.

Donald took the 172-page draft plan from the table and flipped through the first few pages and maps, seeing how his community was being mostly left out of the restoration plans. He said softly how it would just be gone. He talked about how the local people knew where and how the restoration should be done. Theresa bent down closer to the table and nearer to his face with her fists pressed into the wood, "That's why we have to go to the meeting!" In trying to make themselves heard, some residents revealed the power differentials determining what is valued as being in the public interest. However, political and economic structures often led to local people being systematically excluded, increasing people's restoration frustration.

Who Determines the Public Interest and Unjust Compensation

The USACE former Morganza project manager, Rodney Greenup, explained to me that levee districts could expropriate people's property, meaning they take your land and give you compensation, "and this is America." He pointed to the ideology that in a democratic country, such as the U.S., all people are supposed to have equal rights. He also raised the issue of eminent domain, in which private property is expropriated in the name of public interest done for the greater good. The question becomes how to translate what is served by the public interest and who determines what is in the public interest (Oliver-Smith 2009). Furthermore, compensation alone completely ignores the negative social impacts wrought by forced displacement, such as loss of social networks, does not account for the time-gap from disruption and recovery, and often results in those displaced suffering from increased impoverishment and marginalization (Cernea 2002, 2008, 2009; Cernea and Mathur 2008; De Wet 2006; Maldonado 2008; McDowell 1996; Oliver-Smith 2010; Scudder 2005).

Implicit in relocation is that residents have to go somewhere else, and those other places can be blocked by host communities' feelings towards the potential new residents, as happened with the Bourg relocation plan where members of the Parish Council raised concerns about property values decreasing if the Isle de Jean Charles Tribe relocated to Bourg. Thus, the question remains where it is that those needing to relocate can go. People felt that it was important to relocate as close to home as possible. Social disarticulation becomes more severe when people are relocated farther away and the informal structures they rely on, such as exchange practices and social networks for their traditional risk management system, are scattered and shattered (Bisht 2011, 2009; Prasad 2010; Scudder 2005). However, the higher ground nearby was mostly gone, having been taken up by multinational oil and gas corporations and private land developers. And with the area predicted to face the highest rate of relative sea level rise worldwide (Marshall 2013), the communities will have to move even farther inland, competing for the same job opportunities and land with host communities and others relocating, which could lead to conflict (Scudder 2005:27). After decades of witnessing the land loss and experiencing increasing flooding from hurricanes and livelihood effects, many residents continued to face the difficult decision of whether to relocate or stay.

Deciding to Relocate

The environmental degradation, loss of livelihoods, and increased impacts from hurricanes forced more and more people to relocate since the 1980s. As Marlene explained,

[The] channel is three times size it started out to be. With Gulf water coming in with hurricanes it's killing all the vegetation, no roots in ground to hold it together anymore so it's just falling apart. Daddy said we'd have to move somewhere else. That's when he bought property on Indigo Street on Shrimper's Row and then we flooded there too in '85 when Juan came through. Daddy died in '86. In '92 when Andrew came, my mom had stayed down here...When she called me and my mama was short, she had water up to her waist in the house. House was on the ground then...I called Sheriff's office to say someone needed to get them...They got there just as water was at her waist. Water was higher outside. They couldn't open the doors. Son-in-law used tool to pry door open. They caught my mama and had two people to put her in big army truck...My brother met them and brought my mama to my house in Bourg...Then they moved up bayou too.

Many people relocated after hurricanes destroyed their houses. Some people lost their houses to Hurricanes Betsy and Hilda in the 1960s and had to move, but mostly within their same community. Others moved after Hurricane Carmen flooded the area in 1974. After Hurricane Juan flooded people's houses and trailers in 1985, more people relocated. More people moved after losing their houses during Hurricane Andrew in 1992 and even more relocated after Hurricane Lili in 2002, Hurricanes Katrina and Rita in 2005, and Hurricanes Gustav and Ike in 2008. Some people who said they would never leave ended up relocating after hurricanes hit.

Many residents had at least temporarily relocated at some point, especially when hurricanes hit in recent years. Whereas before they used to get in their boats to wait out the hurricane, now without land to slow the water coming in and trees to protect them from the wind that was no longer a safe option. When it floods, the parish can put mandatory evacuations in place. It was repeated to me many times that even if they have to evacuate temporarily, people tend to come back. For many, the times they have had to evacuate are the longest times they have been away from their communities.

Even people who had relocated nearby to Houma were not sure if they would be able to stay there or would need to relocate again. For example, during a Grand Caillou/Dulac story circle at her mom's house in Dulac, Jessica told me about moving to higher ground in Houma, "I

moved away from down here to get away from all the flooding, but I'm thinking that if nothing's done to protect down here, that where I'm moved at, I'm going to be what this town is now."

People who relocated explained their decision based on several reasons related to hurricanes, such as not being able to afford to continue to rebuild after each storm, being tired of cleaning out their houses after flooding, dealing with evacuating every time there was a hurricane, and always worrying about flooding. While hurricanes had always occurred in the area, the frequency with which they were experienced was new, with six major hurricanes and storms flooding the community between 2005-2012. With the loss of barrier islands to the south, people experienced increased flooding. And with more flooding, people were forced to elevate their houses higher, which put them at greater risk of hurricane winds, as well as no more trees left to serve as buffers.

Some people moved with assistance from FEMA because they felt it was the only help they could get and they better take it before FEMA stopped providing assistance to people in the area. Others who tried to come back after their houses flooded ended up leaving because of asthma and other health issues from the mold. Some people relocated because of the skyrocketing flood insurance rates, which could now cost over \$25,000 a year for at-risk homes in the parishes where the tribes are located (Wilson 2013).

Decisions to relocate were not only based on environmental drivers, but also economic ones. People have had to leave since the 1970s to seek work elsewhere because they could not make a living crabbing and shrimping anymore. Some people from the Island relocated because after getting jobs nearby they often could not get to work because there was too much water on the road when the tide came up. Some younger people moved away to receive an education and did not return. Many people fared better financially after relocating, finding jobs, often with the oil industry, and no longer needing to replace household items every couple of years following flooding from hurricanes. People's decisions to relocate were based on a combination of environmental, economic, and social drivers.

There were trade-offs in the difficult decision whether to stay or relocate. For example, François, who lived about 140 miles northeast of Dulac, told me that he had wanted his family to come for a gathering, a powwow, but they said it was too far. His boat had been sitting out for over a year because he did not know any of the good fishing spots nearby. He did not know where elderberries were in these woods. But he and his wife were on dry land. Their kids had received an education. And they had not lost their house again since Hurricanes Katrina and Rita in 2005 when they were living in Dulac. Therefore, while he experienced positive benefits of education for his children and less damage from hurricanes, he felt isolated from the rest of his family and did not have the local knowledge of the water- and landscape.

Most people I spoke with who had relocated told me they tried to stay as close to home as they could, just on higher ground, because they wanted to stay near the type of environment they were used to and did not want to get too close to the city. They coped with relocation by remaining close to people who shared their common heritage, livelihoods, familial and tribal ties, food traditions and practices, and a familiar landscape.

Some people who relocated nearby were still integrated in their community through subsistence and resource sharing. For example, I went with Patrick, who relocated to Montegut, down to Pointe-au-Chien where he kept his boat so he could get the couple hundred pounds of shrimp stored in the coolers on his boat from shrimping the night before. His sister came over and started filling up a cooler with shrimp for herself and then one for me. His mother came out of the house in front of where his boat was docked, which he built for her after Hurricanes

Katrina and Rita. His mother invited me in to try the shrimp she had just fried and some crab patties. We looked out the window at the lightning in the distance. She told me how the water behind her house used to be all land. I watched the rain pound against the water behind her house. Patrick and I dashed back out to the road and loaded up the rest of the shrimp. As I drove up Oak Pointe Road, I saw Patrich's white "Cajun reeboks" flash down from his truck and run into the house a few doors down, delivering shrimp to his aunts. The next day he went back on the tugboat for fourteen days.

The Tensions of Relocation as Adaptation

When I spoke with the current Director of the TLCD, who was originally from upper Pointe-aux-Chenes, he felt that if they could put a tourniquet on the problem to stop the bleeding through shoreline protection and marsh creation they could make communities like Pointe-au-Chien on the mainland habitable for another forty or so years, which would buy time to make decisions for future relocation, but places like the Island were almost gone. Louisiana's 50-year Master Plan for a Sustainable Coast had the option of voluntary relocation for individual households wanting to relocate (CPRA 2012), but relocation as a community was not yet included in the Plan. The Master Plan projected that three to five percent of people along the coast would need to be relocated. However, even these numbers were already outdated, as more recent predictions by NOAA had southeast Louisiana experiencing the highest rate of relative sea level rise worldwide (Marshall 2013).

While the Pointe-au-Chien Tribe, which has some storm protection and land left, was not yet considering relocation, tribal leaders from Grand Caillou/Dulac were starting to consider options for community-led relocation. The leaders would like to have a plan in place so they could be prepared because of the lack of hurricane protection and rapid speed of land loss,

erosion, and increased impacts from storms. The Grand Caillou/Dulac leaders were trying to figure out the best plan of action because they did not want to relocate as individuals. If no other options existed to stay, they would like to relocate as a community to preserve their culture and heritage, and to be able to continue their efforts for federal recognition. During her two minutes to speak at a public hearing in Houma about the draft Coastal Master Plan, Chief Shirell talked about how options for community relocation should be included in the Plan, but first and foremost their culture, heritage, and traditions need to be preserved. She said, "we are presented with a plan that contains no equitable balance...the only option our people have had is to relocate...doing so individually will annihilate the beauty of what it is to be an American Indian resident on the Gulf Coast."

Most immediate though, the Isle de Jean Charles Tribal Council had been looking to relocate the community for over a decade. Experiencing the most drastic environmental changes of the three communities, the Isle de Jean Charles Tribal Council was concerned that because tribal members were so scattered, the tribe would no longer exist if they were geographically separated. Therefore, to bring their people back together, the Isle de Jean Charles Tribal Council was working to relocate together those who had scattered and those who would like a communal safe haven from the flooding and storms. At the same time, wanting to be sure that others did not come in and develop the land if the tribe relocated, the leaders wanted to also work to mitigate further deterioration of the Island, even if the community relocated. As Chief Albert explained, "[p]eople want to come back to the community. We have to come together to make sure the land belongs to us while we move to a safe location" (Coastal Louisiana Tribal Communities 2012).

Concerns over the land disappearing and with it the tribe's culture and community were embedded in a socio-historical context in which people pointed to lessons learned from the
tribe's own ancestors, as well as other tribes. As Gabrielle, an Isle de Jean Charles tribal

member, explained while we talked in her living room in Houma,

If we lose it, if we lose the Island, which we theoretically will and everybody disperses, then they won't be together and we won't have that close-knit anymore. But if you can keep them together, then we could still have that, we could recreate that, our place. We created our own, our original ancestors had to recreate it every time they moved away from whatever, the people from the Trail of Tears, the six tribes moved off their original land, they recreated it in Oklahoma and other places out of necessity. So it can be recreated, it's been proven.

Continuing our conversation, I asked Gabrielle what she thought about the Tribal Council's plans

for relocation. She explained,

I think a lot of people who are off would come back because a lot of people didn't leave by choice. A lot of people were forced, they had no other choice. They had to leave...if they relocate, they will have people come back because it's our culture to be together. It's instilled in us. We have family reunion, powwow, everybody comes back. It's in our nature to be together. The core of those people who ran away from the French and settled there, they were together, close knit to stay together from the whole journey and settle there together. Our people are calling us back. I think it's time we get back to our culture. And unfortunately it has to be a new place, but it could still be done. Alternate plans if relocation doesn't work? You want the truth of Plan B? The cold, ugly truth? If we don't relocate we lose our culture, we lose our, we lose the Island's gone in the next hurricane or the next ten or fifteen years the Island's going to be gone, people will be spread out all over...You will no longer have a place for everybody to come back to.

The Isle de Jean Charles Tribal Council's relocation plan included maintaining

community and cultural integrity and promoting traditional livelihoods, economic development

related to people's skill-set as fishers, and sustainability. As Chief Albert explained during a

cross-community conversation with an Indigenous leader and researcher from Alaska,

It's hard to say you're going to pack up and leave. But the thing is that the restoration for Isle de Jean Charles is not there. Therefore, we know that it's not going to get any better...our cry for relocation that it's not just restore our community, but give us some type of economic development where we could put people to work and not have to worry about handouts later on. We'll have our own funds to where we could survive off of that. We're not just asking for a place to live, but we're asking for some type of economic development where we could support our tribe and our people. And so far we don't have anybody stepping in. They don't want to help us because we're Indians and they want to get rid of us. They're doing a good job with Isle de Jean Charles. And they're going to do

a good job with Pointe-au-Chien. They're going to do a good job with Grand Caillou/Dulac. Because they're going to make them move into communities of non-Indians where our blood quantum is going to get lower and lower and finally, Andrew Jackson is going to have his way of getting rid of all the Indians.

Over the years the Tribal Council had run into countless policy obstacles and practical challenges of community-led relocation, such as the plans that fell apart through the USACE and the discrimination faced in Bourg, as well as not enough funds for the land. There was no federal government agency mandated to manage communities' relocation efforts and there were no funds for pro-actively moving an entire community (Bronen 2011; Maldonado et al. 2013; Melillo et al. 2014).



Figure 33. Chief Albert at the South End of Isle de Jean Charles, Where He Grew Up. Source: Julie Koppel Maldonado, 2012.

The tribal leaders were challenged with working in two realities. On the one hand, they did not want to get to the point of realizing the need to relocate too late, as relocation plans take many years to effectively develop and implement. On the other hand, with limited resources and time, there needed to also be a focus on saving

what was left of the land and maintaining the community in place as long as possible. But, as Chief Albert said, he liked to think of relocation as restoration, as that seemed like the only option they had. Chief Albert explained to me that he was not going to make the people who wanted to stay move, but he just wanted to bring the community back together.

Chuckie, the Chairman of Pointe-au-Chien, told me if another big storm came and people had to leave, he did not necessarily see everyone coming back. His words did not align with what some Pointe-au-Chien residents said, but pointed to the complicated situation in which the leaders found themselves. As we sat talking at his kitchen table in Montegut during the couple of days he was off the tugboat, he voiced concern over whether people would be able to stay or not. But then, he spoke deliberately, with slow, quiet emphasis, "You can't just move people from the only way of life they've ever known. People here are fishers, that's all they've ever known." Thus, the leaders were caught in the tension of trying to do what they felt was best for their communities, while also respecting the people in their communities who did not want to relocate.

Paradise Elsewhere?

I sat with Chief Albert in his house in upper Pointe-aux-Chenes, listening to his visitor, Joe, an Indigenous man from a tribe outside Louisiana propose ideas for the BP settlement and a relocation scheme. Joe explained that a private developer had bought thousands of acres of land near the coast of Mississippi and he was willing to sell it to the tribe. After Joe left, I stood on Chief Albert's front deck and told him that something did not feel right. His hands rested on the railing. He sighed, "It's just so far from home."

At Chief Albert's request and with the Tribal Council's consent, a few weeks later I drove to Mississippi, along with an Isle de Jean Charles tribal member, to meet with the developer to see the plans on-the-ground. I walked into his high-rise condominium looking over the Gulf water. Joe was also standing there, claiming to be in town on other business. We sat around a large dark brown table ready with four chairs. I slid in and the chair slanted me back. I scooted upright to be eye-level with the two men. The walls were covered with maps of development projects the developer had underway. One included a development he was planning nearby; the developer said tribal members could get work at the planned theme park.

Joe and the developer drove us around the 1,000-acre property the developer was proposing to sell to the tribe. The property ran parallel to a river a few miles inland from the

coast. On one side of the property was a development with McMansions and the other side was trailer parks. We went to a nearby City Hall and met with the Mayor. The developer talked about how there were state politicians from Mississippi that wanted the tribe here and would back them, just that, he joked, they could not burn the ships this time, referencing what the Biloxis did when they were originally forced to flee. The Mayor was surprised that the state of Louisiana had not done anything to help the tribe, but felt that the city of Biloxi would not want the tribe there because would fear interference with the city's gaming industry if the tribe put in a casino. I knew this was not the tribe's intention at all. I looked over at the developer and Joe, both of whom seemed to have business connections with the gaming industry in the area. I did not see how this would be a viable option for community-led relocation, where the tribe maintained control, instead of being strong-armed into something.

As I drove back to our camp in Pointe-au-Chien that night, I thought of how Chief Albert joked about putting a sign up at another possible relocation site inland near Houma to say, "Isle de Jean Charles 2." Later that same night, I dreamed about the new potential site, which the tribe did not yet have funds to purchase. In my dream the land was right along the bayou, filled with big cypress and oak trees. When I awoke, I realized that the images in my dream were from pictures I had seen of what the Island used to look like. I began to better understand why even while planning relocation, the tribal leaders still emphasized the need to protect what was left of their lands.

"A Symptom of What's Happening Everywhere"

Relocation and the loss of cultural practices, traditions, and a way of life were not just happening in the three tribal communities, but throughout coastal Louisiana. As Kerry St. Pé, the Executive Director of BTNEP, explained to me, "People are moving away. Farther up and farther out, out of state. And that's the one thing I fear most because that's the culture, everything's about that. The fact that we've kept these people here generation after generation and we're losing that. Isle de Jean Charles is just a symptom of what's happening everywhere." Descendants of other population groups who had been in the region for centuries, such as the Acadians, Isleños, and African and Caribbean slaves, were undergoing similar experiences to that of the tribal communities.

Yet, local, state, tribal, and national government agencies do not currently have the capacity to support relocation processes and the U.S. does not have an institutional framework to support the relocation of entire communities (Bennett et al. 2014; Bronen 2011). The lack of governance mechanisms or frameworks to support communities facing displacement intensifies the negative economic, social, cultural, psychological, and health impacts being experienced (Bennett et al. 2014; Bronen 2011:360; Maldonado et al. 2013). And with people's adaptive capacity diminished by the layers of vulnerability, increased marginalization, co-occurring adverse events, and political and economic structures supporting large industries over local residents and communities, there are fewer and fewer options for in-situ adaptation. Despite constraints, the three communities were actively adapting to the environmental, social, and economic changes.

"It's Like Nowhere Else: Adaptation and Resistance Down the Bayou"

Our people have always lived off the water and land. We're bayou people. After a storm, sometimes there's still water on the road, but we come back. People here come back. It's like nowhere else.

- Theresa, Pointe-au-Chien Indian Tribe, excerpt from digital story

When used in a social scientific way, adaptation "refers mainly to changes in belief and/or behavior in response to altered circumstances to improve the conditions of life (or

survival)" (Oliver-Smith 2009:12). Adapting to environmental change involves not just the natural stresses, but also the connection between natural stresses and other sources of system stress (Nelson et al. 2009:272). While people's agency was constrained by structural violence (Farmer 2004), many people from the communities still employed adaptation strategies. Much like the continued flow of water up and down the bayous they live along, their adaptation was often subtle, quiet, but persistent.

The tribes and residents employed many adaptation strategies to the environmental changes, such as emphasizing the importance of traditional, local knowledge (Maldonado, in press). For example, as Patrick, who relocated from Pointe-au-Chien to Montegut, described, "I grew up shrimping. I've been shrimping as soon as I started walking, I guess." With their memories tied to their livelihoods and the landscape, they have accrued knowledge over generations of living off the water and land. As Nicholas, a fisher from Pointe-au-Chien, said, "I say we've been here all our lives. We know how the water works." Their multi-generational knowledge of the surrounding waterways, habitats, and landforms enabled them to see the changes happening and what needed to be done to mitigate and adapt to the impacts. For example, Celine, from Grand Caillou/Dulac, described how "there's places that used to be there that aren't there anymore, like patches of grass that you could literally walk on are gone. I know my dad can still, when we go out shrimping, he can still spot everything, he knows because he knows the land, this was his life."

Some of the adaptation strategies the tribal members undertook were focused on rebuilding their subsistence livelihoods and restoring their traditional plants. For example, the tribal leaders were pursuing planting traditional, medicinal plants and vegetables in raised-bed gardens with the support of a nearby U.S. Department of Agriculture Plant Materials Center.

Through partnerships with the U.S. Department of Agriculture's Natural Resources Conservation Service and the Barataria Terrebonne National Estuary Program, some tribal members recorded which plants had been lost and those that still existed. This provided a better understanding of preservation pressures and identified what could be grown in the current soil conditions.

However, this also meant that the communities were forced into conducting a "cultural triage," a forced choice to rank in importance cultural resources to be saved (Stoffle and Evans 1990). Other important resources might be saved as well, but might be done by moving the resources elsewhere. For example, some of the medicinal and traditional plants could be grown in the Plant Materials Center. However, in growing the plants outside of the communities, the physical landscape for the cultural resources would be broken (Stoffle and Evans 1990). This is why the tribes were working to continue to plant in their communities and save some of the few remaining plants. They were also working to restore important places, such as their sacred mounds, despite facing obstacles with permitting and land ownership due to the state and oil companies taking over the land, as discussed previously.

Some residents adapted practices to maintain what they could of their subsistence and traditions, like still planting despite the saltwater intrusion. For example, Renée, from Isle de Jean Charles, said, "I'm going to be planting as long as I live." She said this even though she acknowledged a moment later that nothing was being done to protect her community and government authorities would not listen to the residents. Despite the uncertainty, a few days later we chatted together as she planted in front of her house. To keep her plants out of the encroaching saltwater, she was planting in an old toilet bowl she had cleaned out.

Other strategies for adapting to increased flooding and impacts from hurricanes and storms included elevating the houses above the floodwaters. With the rising tide, elevated houses

had become a part of the landscape. As Chairman Chuckie explained, "Pretty natural thing now going up with houses. Hardest time is for elderly with the steps. Some lucky to get elevators. Build themselves, through tribe, Catholic charities paid for some." He continued, explaining when people started raising their houses,

Some houses started going up after Juan in mid-80s. Andrew comes along and build a little higher. Rita and Ike came through, went up higher. Now law says have to go up higher. For Rita and Ike when went up, not high enough now, so had to lift twice. Lots didn't want to go up, but got to point where storm you'd be underwater, a lot of work and aggravating, with FEMA. Guess they just love being there for the fishing or the community.

As flooding increased, they had to elevate higher and higher. For example, the last house at the end of Oak Pointe Road in Pointe-au-Chien belonged to a woman in her sixties. The house was elevated nineteen feet high, but did not have an elevator. Therefore, this amount of elevation was not a practical strategy for the elderly. People injured themselves going down the steps and there was more vulnerability to the wind during storms. Yet, people had been able to stay because they raised their houses. And without trees left to provide shade, many people enjoyed sitting outside underneath their houses.

People also adapted by cleaning up after a storm and coming back. As Celine said, "Regardless of how we have to rebuild and rebuild and rebuild again, this is our home. This is home. This is where we've stayed. Regardless of whatever big storm, little storm, just pick up the pieces and put them back together." Similarly, as Chairman Chuckie said about Pointe-au-Chien,

Everyone's so content living there, talk with anybody and they like close knit community. Even after Katrina, Rita, and Ike, maybe one family moved out, and in process of moving out before. No one moved out of there. After what they went through, rebuilt and rebuilt higher. As long as can, will keep it together. By continuing to rebuild and come back, residents maintained their sense of place and cultural identity.

Some people adapted to the land loss and erosion by putting oyster shells, rocks, and dirt around their houses and trying to rebuild important places, such as ceremonial mounds. As Nicholas explained while we chatted on his porch in Pointe-au-Chien,

My brother and I putting rocks, cutting grass with tractor and stop from eating up...Ain't got nothin' to stop the water, just getting worse and worse, less area to stop the water. I'm putting oyster shells out, so maybe that'll do some good. Stop some of that erosion down the bayou. I bought two loads, my brother bought three. Put some along the ridge and along the bank. That's what we're trying to do with the mounds, but have to get permits and all that. Indian mounds getting eaten up as we speak, eaten up more and more. Got to go through too much bs to get something done.

When I asked him why it was important to restore the mounds he said, "My ancestors used to use that for some reasons. If we let that wash away, your heritage wash away, so we try to stop some of it." Despite being alienated from the restoration process and running into obstacles with permitting and land ownership, some residents still continued to press local authorities to take action to mitigate against further environmental degradation.

Accidental Activists

While residents did not directly confront authority through organized protests on the streets, several of them had become "accidental activists." For example, Jean sent letters to local parish representatives about needing restoration efforts. And while Isle de Jean Charles was still cut out of the Morganza Hurricane Protection System, with pushing by Isle de Jean Charles tribal members at Terrebonne Parish Council meetings, the parish built a small earthen ring levee that had somewhat helped mitigate flooding during high tide.

Other Island residents told me about their interactions with the Parish Council after Hurricanes Gustav and Ike in 2008 tore up the road that connects the Island to the mainland. Regina described going to the Council about rebuilding the road and that, despite the cost-benefit concerns raised by the Council, the community stood their ground until the road was fixed,

[The Parish Council] didn't want to build the road. But we had to do some fighting for that. We went to the council with Albert...It was like two years maybe, two years and a half, that we kept on going with Albert to the Council. As many as could go, we packed out the place... And finally they agreed they had to come and fix the road and some didn't want to do it because there's hardly nobody here and they didn't want it to be done because they said why go give a \$2 million road and they only got twenty people living on the Island? And [council member] says well it doesn't matter, you have a business down there, kids go to school, the mail's got to pass and he says so it's a Terrebonne Parish road, Terrebonne Parish ordinances and so if the road's messed up you got to go fix it. And so finally they came together and came talk to the people and what we wanted. It took maybe a year and a half, two years before they even heard us and then finally they started in the newspaper, finally going to get a road. We were so happy...Then the machines started coming and they said we're only going up one foot.

In 2011, Terrebonne Parish started \$6.24 million of repairs to the two-lane road, with 2.36 miles of the road being elevated one-foot, which residents recognized was not enough for a long-term solution. FEMA paid for most of the bill to fix the road to pre-storm conditions, but refused requests by the parish for enhancements (King 2011).

Without enough support for restoration and flood protection to keep the remaining land above the rising tide, the tribal leaders interacted with organizations and agencies from the local

to the international level, such as speaking to representatives from the U.S. Environmental Protection Agency, local levee districts, and numerous organizations along the Gulf Coast, as well as the United Nations to bring international attention to the crisis occurring in coastal Louisiana, the potential forced displacement the tribes and many other communities were facing,



Figure 34. Sign Put Up by Resident on Isle de Jean Charles. Source: Julie Koppel Maldonado, 2010.

and the immediate need for restoration actions. Some other community members continued to speak out to save their land, as Chris described, to "keep us on the map," while others maintained silent demonstrations, like putting up signs to announce that they were not going anywhere.

The tribal leaders also created formal organizations. For example, through the U.S. Department of Agriculture's Natural Resources Conservation Service, the three tribes, along with Grand Bayou, another nearby tribal community, created the First People's Conservation Council to address natural resource issues occurring on the tribal and coastal lands. The organization was formed through the tribal leaders and the support of the Center for Hazards, Assessment, Response, and Technology at the University of New Orleans, and the Natural Resources Conservation Service Wisconsin Tribal Advisory Council.

More informally, but still coordinated, through the work of researchers at the Center for Hazards, Assessment, Response, and Technology and a nearby religious congregation, the tribes held fellowship gatherings with community representatives from Alaska and Minnesota, sharing knowledge and cultural traditions, such as basket-making, ethnobotany, and experiences of extractive industries effecting their communities and landscape (Maldonado et al., in press).



Figure 35. The Bayou Landscape, Pointe-au-Chien. Source: Julie Koppel Maldonado, 2012.

Reflecting on her time with the communities, Jaden, a tribal leader from Minnesota explained, "Through everything these communities have been through, they're not whiny, they're looking to solve their problems. They're looking to have people not bail them out but just to help them, to understand who they are."

The tribal leaders had connected with communities affected by the 1989 Exxon-Valdez Oil Spill in Alaska. Representatives from the tribes went to Cordova and Valdez and vice versa to learn about each other's experiences and share their stories. Serene, from Alaska, reflected, "I came to the bayou with everybody and I looked at it and I went, oh this could be Cordova...We have more similarities than we have differences...It isn't just whatever person's story, it's the people's story." Leaders from Newtok, Alaska had also visited, sharing knowledge and exchanging lessons learned about their process and experience of community-led relocation.

Conclusion

I belong to the Grand Caillou/Dulac Band of Biloxi-Chitimacha-Choctaw Indians. I am proud of my heritage and culture. My people are proud and strong. We instill this in our children from birth as we must overcome many obstacles in our bayou homeland of Louisiana. We have to fight for education opportunities for our children, jobs, our land, and our way of living.

The loss of our homeland is the hardest battle to overcome, but we will never give up. We are relentless! From land being swindled back in the 1800's to the scariest villain yet; land erosion. We lose football fields every day! The government doesn't do anything to save our land and neither do the oil companies who are responsible for digging the damaging canals many years ago. These companies reap the rewards while we are left to sink into the Gulf of Mexico. They didn't rape Mother Earth; they have destroyed her and my people and our heritage with their lack of morality and common sense. These people have completely missed the concept of my favorite proverb, 'We do not own the land. It was not given to us by our ancestors; it was loaned to us by our children.'...

They say we can't be saved. They say that we have to relocate to preserve life. Once again they have proven us to be expendable in their eyes. But we have proven that we never back down from the impossible. We will continue to fight for our way of life, for ours is unlike any other. We will fight until the last tree has died, until the last bit of land has washed away. We will always fight for our 'Home.'

- Chief Shirell, Grand Caillou/Dulac Band of Biloxi-Chitimacha-Choctaw Indians, excerpt from digital story, 2012.

In the excerpt above, speaking from the perspective of a tribal leader, Chief Shirell's

words talked about how identity is tied to place, the socio-cultural impacts of displacement, and

how current experiences were embedded in multi-generational, social memory. The tribes'

ancestors were pushed out of their homelands and forced down the bayous to survive, only for

the current generations to find themselves discriminated against, once again facing displacement and restoration and flood protection decisions made by government authorities based on costbenefit analysis that the tribal communities were not economically worth saving. As the restoration process became an object of commodification, the residents became further estranged and alienated from the physical environment and denied the input of their local knowledge, which could be an invaluable contribution to the restoration process (see also Burley et al. 2007:348; Thornton 2008:140).

Practitioners have documented the consequences of forced displacement that often go unmeasured in cost-benefit analysis, such as Cernea's Impoverishment Risks and Reconstruction model that includes eight impoverishment risks people often undergo when they are forcibly uprooted: landlessness, joblessness, homelessness, marginalization, food insecurity, increased morbidity, loss of access to common property resources, and social disarticulation (Cernea 1997, 1999, 2005). These risks point to the need to consider the actual consequences of forced relocation and the measures that need to be put in place to support communities through the relocation process if it is no longer viable for them to stay in place.

As pointed out in the last paragraph of Chief Shirell's story, while faced with an uncertain future of whether the diminishing land the tribes live on will stay above the rising tide, many people continued to adapt to a changing environment. They both consciously and unconsciously resisted against continued colonial practices and neoliberal policies, such as the exemption of the oil and gas industry from major provisions in environmental laws, that threatened their livelihood, culture, and identity. The tribes' leaders approached adaptation as a process, not an outcome, one in which adaptation is connected to social agency, power relations, and issues of environmental justice (Peet and Watts 1996).

This section was not intended to portray all residents as undertaking the same adaptation strategies or everyone having the same vision of adaptation. However, while there were few people from the communities who acted as advocates, many residents undertook different forms of everyday adaptation, whether it was putting oyster shells around their house or continuing to come back and clean up after each hurricane. People's adaptation efforts could be both selfindulgent and revolutionary, with the intent for survival and immediate- and long-term gains. Their strategies took place within a specific social, political, and economic context. Thus, many tribal members both resisted against the dominant system but also found ways to adapt and survive within it.

CHAPTER 8

CONCLUSION

The preceding chapters focused on three research objectives: (1) how people from the three tribes were adapting to environmental change, including making decisions to resist physical displacement or relocate; (2) how people experienced environmental change and displacement; and (3) how environmental degradation intersected with economic, social, and political power structures. Overall, this dissertation discussed the connections between structural violence, environmental change, displacement, and power.

The co-occurrence of disasters, capitalist-based infrastructure development and resource extraction, climate change, globalization, and forced assimilation caused livelihood, health, and socio-cultural effects for both people who had stayed in place and those who had relocated. Many people from all three communities had relocated because of increasing impacts from hurricanes, loss of livelihood, and other economic and social drivers. There were also many people who had stayed because of their livelihoods, sense of belonging, cultural identity, and way of life tied to a specific place.

Both people who had stayed and people who had relocated experienced the loss of a subsistence-based and shared family livelihood, cultural practices, language, and traditional medicine and related knowledge. They experienced diminished sharing and resource exchange, sense of community, and social networks. Both groups also suffered negative health effects, although these issues seemed to be worse for people who had stayed. Many of the people I spoke with who had relocated moved nearby so were still affected by the pollution and contamination. While people who relocated often did better economically, their new jobs changed family dynamics. This was also true for many people in place as well, who had lost their subsistence-

based livelihoods and turned to other jobs, often with the oil industry. The severity of effects was often voiced most strongly by people from Isle de Jean Charles, as they were facing the most extreme environmental changes and were the most excluded of the three communities in stateled restoration and flood protection plans. As the landscape in which residents had carried out their livelihoods and cultural practices, and of which they had multi-generational knowledge and memories, rapidly changed, many people experienced a sense of dislocation even while in place.

The capitalist-based practice of natural resource extraction and the onset of humaninduced climate change are a continuation of the structural violence the tribes and their ancestors have faced for generations. While climate change can bring many issues together to act as a tipping point, we cannot view it in isolation while the causes behind the issue go unnoticed and continue to chug along, spewing forth into the atmosphere. The data showed how environmental degradation and state-led coastal restoration and flood protection plans reflected and reproduced social inequalities and power dynamics that have turned coastal Louisiana into an energy sacrifice zone. A single hurricane, oil spill, or sea level rise alone was not forcing people to relocate. Rather, it is the legacy of atrocities and layered processes of systematic discrimination, unsustainable, capitalist-based development practices, and regulations about resource extraction, control, and use that have resulted in an increasingly changing climate and put the tribal communities at risk of community-wide displacement. Thus, occurrences such as the 2010 BP Deepwater Horizon Oil Disaster and the politically managed cleanup process that further contaminated the environment and effected people's health and livelihoods are not isolated events, but rather are part of a greater, socially constructed disaster.

Environmental change and its impacts are "symptoms of deeper pathologies of power," reflected in the prevailing economic, political, and social systems (Farmer 2003:7; also Austin

2004; Wolf 1999). Environmental degradation is a form of tacit persecution. Modern economic and political processes position humans and the environment in conflict, mask such destruction, and establish a framework that leads to the overconsumption of natural resources and the disconnect between consumption, production, and environmental degradation (Foster 1999; Kütting 2004; Marx 1994).

With their lives, livelihoods, and knowledge systems intricately linked to the physical environment, Indigenous and other communities who have lived in a place for generations are particularly at risk of the impoverishing effects of environmental change and displacement (Gautam et al. 2013; Whyte 2013). As the three tribal communities that are the focus of this dissertation face the potential of community-wide forced displacement, it is important to consider the effects already being experienced to better understand how to mitigate against the potential risks of displacement that have been well documented in the social science literature.

It is also vital to understand the root causes of displacement to stem continued injustices. Infrastructure development practices during the colonial era and twentieth century demonstrated the cyclical damage caused by building infrastructure to try and control waterways. As flood protection measures are considered against the increasing impacts of hurricanes and rising sea levels, unless the underlying causes of climate change are addressed, the fortress of sea walls will be raised ever higher, potentially leading to second-order effects, such as the environmental devastation caused by the dredged canals and changing waterways in coastal Louisiana.

The following sections include recommendations based on this research to be considered by government agencies, communities facing environmental change and displacement, and researchers.

Recommendations

- Create a socially just adaptation process that includes more equitable knowledge sharing, local community participation, and multiple forms of knowledge in decision-making. As communities understand environmental changes based on their relationships to the environment, scientists and policymakers must be ready to engage with these communities and make sense of the changes and impacts being experienced from local people's traditional knowledge and perspectives (Maldonado 2014b). Including "indigenuity" and multi-generational traditional knowledge into adaptation planning and decision-making would help to democratize the adaptation process (Wildcat 2009, 2013).
- Conduct research and decision-making *with*, not *on* or *for*, communities. Decolonization of research and policy-formation is required (Barnett 2010:10), which could be done through the inclusion of Indigenous and non-Indigenous scientists' knowledge. Including local, traditional knowledge and understandings of a resource system can decrease the vulnerability of people and the resource system to changing conditions. Community management of resources contains valuable elements for resource management systems, particularly traditional knowledge of the specific characteristics and workings of the resource system and culturally acceptable ways of managing resources (Stern et al. 2002).
- Establish a legally-binding set of principles for a system of respect to guide the sensitive process of how local, traditional knowledge is understood and incorporated into adaptation plans. Including traditional knowledge and western science equally into the scientific and decision-making processes needs to be done justly and respectfully to not turn the co-production of knowledge into co-optation (Pulwarty 2013; also Williams and Hardison 2013). For example, as Cruikshank explained, "codified in government reports, information formulated as [traditional ecological knowledge] tends to reify and reinforce a Western dualism—prying nature from culture—that local narratives challenge in the first place" (2001:389). In bringing together local observations, experiences, and data collection from both Indigenous and non-Indigenous scientists, careful attention needs to be given to handling and protecting culturally sensitive traditional knowledge and respecting systems of responsibilities (Cochran et al. 2013; Whyte 2013; Williams and Hardison 2013).
- Shift from the current economic-based framework for adaptation to a people-centered framework that focuses on human rights and local participation in decision-making. Such a framework should work to address the social, political, and economic inequalities created under our current economic and political systems (Maldonado 2012b). For example, restoration and flood protection decisions made based on cost-benefit analysis need to be critically examined and considered in light of social and environmental justice. Second-order effects of adaptation plans need to be considered, such as what dam building in one area means for downstream communities.

- Relocation should only be considered after all possibilities for staying in place have been pursued. Communities should be empowered to make their own decisions on whether relocation is a necessary adaptation strategy or not (Hugo 2011), especially important given the long history of Indigenous experiences with forced displacement and relocation (Marino 2012). While relocation can be considered as an adaptation strategy, it cannot be used as an excuse to force communities out. Offering support only for individual relocation, instead of by community, further scatters a community and tears apart its social and cultural fabric.
- **Relocation needs to be community-led.** Such efforts need sensitive and culturally appropriate government and organizational support and funding, working to reduce the pre-existing risks and vulnerabilities that put people in harm's way. Relocation plans need to be community-led because there are important elements to consider beyond just physically relocating, such as choosing a new location, housing configuration, maintaining social networks, livelihood opportunities, and creating a plan for sustainable community development.
- Effective and just community-led relocation requires including the communities' voices and input in all decisions and developing respectful relationships between tribal communities, government authorities, and all involved entities (Farbotko and Lazrus 2012; Maldonado et al. 2013; Whyte 2013). This means understanding people's social and cultural values and worldviews, which requires an iterative, participatory process between project implementers and local populations that considers how different frameworks envision the future (Maldonado 2012a; Stammler 2007).
- Lessons for relocation need to be learned from development-caused forced • displacement and resettlement. Relocation actions need to be carefully planned and supported because of the potential consequences of forced displacement and resettlement, such as the impoverishment risks described in Cernea's Impoverishment Risks and Reconstruction model, and the devastating social, cultural, economic, and health effects that have occurred around the world in cases of forced displacement. Lessons also need to be learned from the ineffectiveness and increasing impoverishment risks of government agencies only providing cash and/or land compensation to the people displaced. This is particularly important given that the development plans for resettling people have paid insufficient attention to the intricacy of the socio-economic systems trying to be re-established and to the political components of displacement and resettlement (Koenig 2006:105-6). By simply regrouping people without the thought of these other components in mind can continue the impacts of "root shock" and leave people still feeling dispersed and unsure of what to do (Fullilove 2005:14).
- Establish a legally-binding relocation framework that takes a justice- and rights-based approach, one that demands the recognition of the social and cultural components of displacement (Bronen 2011). The human rights

implications are particularly important to consider, as people affected by environmental change, especially with the increasing impacts of climate change, face the potential loss of human rights to adequate food, water, and health (Office of the United Nations High Commissioner for Human Rights 2009). The framework needs to include a system of rights and responsibilities that establishes which government agencies are responsible for supporting the different components of relocation and how agencies should work with community leaders in supporting the implementation of community-led relocation plans. The framework also needs to be flexible to account for varying reasons for relocation, such as because of direct climate change impacts like permafrost thaw, or the combination of factors, such as from sea level rise and infrastructure development-caused land loss. It also needs flexibility to allow for pro-active relocation, such as a community deciding it needs to relocate to stem further damage from increasing hurricane impacts or sea level rise. Ensuring that all created policies and practices are rooted in a human rights framework would enhance the protection of Indigenous peoples' rights to self-determination and preservation of their social and cultural worlds, serving as a model for both Indigenous and non-Indigenous communities (Bronen 2011; Maldonado et al. 2013).

- Put in place an independent evaluation process to ensure the rights of people who are relocating. The evaluation team would need to consider effects including, but not limited to, cultural sovereignty, livelihoods, social networks, health, and extent of increased or decreased vulnerability through the relocation process. The evaluation would also need to consider the migratory pressures on host populations if the community that is relocating moves in or near an already developed location.
- Increase political will for mitigation. Disputes between political parties or a struggling economy cannot be excuses for inaction. A recent White House report acknowledged that it is not only about the multi-billions of dollars more per year it will cost if policy actions to mitigate climate change are delayed, but more so, all of the important social and environmental elements that cannot be given a monetary value (White House Council of Economic Advisers 2014). People need to demand at the local, regional, national, and international levels a socially just adaptation process to the changes already occurring and a shift away from unsustainable resource extraction and burning of fossil fuels and towards a society that looks ahead generations at a sustainable future for all.

Future Research Needs

Given the findings of this dissertation and the above recommendations, future

research should consider:

- How are communities adapting to environmental changes? What lessons could be learned from the process that could be shared with other communities facing similar circumstances?
- As places and place names disappear due to sea level rise, what does this mean for people's traditional knowledge and ability to continue to adapt in place?
- How do climate change impacts intersect with other stressors to cause displacement of communities? Research needs to consider the multiple stressors working together and look at how climate change could act as a tipping point to cause forced displacement.
- How can communities continue to viably live in place and ensure the protection of cultural sovereignty while community-led relocation is planned? This is important because typically, once a community is marked for relocation, services to that community are diminished or stopped, but relocation can take multiple decades to happen, as has been illustrated in the case of Isle de Jean Charles.
- What are examples of community-led relocations already taking place and the lessons that can be learned from these experiences? While more communities are forced to pursue relocation plans, knowledge could be shared across communities to better understand what avenues others have already pursued, what worked, and what did not.

Local and Global Implications

Along with the environmental changes already occurring, increasing climate change impacts and further widespread processes of resource extraction continue to threaten coastal Louisiana and its residents. With the development of technologies, it is possible to drill for oil offshore at even greater depths and hydraulic fracturing is sweeping through Louisiana to extract natural gas, threatening to further poison the waterways. The environmental change and displacement occurring in coastal Louisiana is a microcosm of what is happening around the world. Human-induced environmental changes, such as those from the impacts of climate change and unsustainable development practices (e.g., oil extraction and exploration), are displacing millions of people around the world, with millions more living in harm's way (IPCC 2007, 2014; UNDP 2007/2008). In particular, entire Indigenous and other communities living in coastal and low-lying areas that already face a multitude of stressors are being forced to relocate (Bennett et

al 2014; Bronen 2011; Coastal Louisiana Tribal Communities 2012; Maldonado et al. 2013; McLean et al. 2009).

However, the people most affected are demanding change, as illustrated by recent movements such as Idle No More and by coastal Louisiana's residents speaking out at public forums. It is time for a cultural shift from the unsustainable ways resources are extracted and used towards a future that ensures the rights of the people and the environments in which we live for generations to come. Capitalist-driven processes are not inevitable; they only exist because they have been so engrained in us as being natural, that we forget there are other social and economic forms that could take their place (Marx 1994). The question remains whether the institutionalized violence will perpetuate or if local, traditional knowledge of the lands and waters will be respected and guide efforts to restore the land, adapt to environmental changes, and re-imagine ways to live more sustainably in a world faced with the ever-increasing consequences of a changing climate.

APPENDIX A

DESCRIPTION OF PARTICIPANT	S
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Name	Affili ation ⁹	Locati on ¹⁰	Age	Se x ¹¹	Religi on ¹²	Eth nici ty ¹³	Educati on	Prima ry Langu age ¹⁴	Job (2012)	Job (former)	Rel oca ted ¹⁵
Greg	GCD	Houma	40s	М	С	FI	High school	F	Unemployed	Oil	Y
Celine	GCD	GC	20s	F	С	FI	High school	Е	Unemployed	Food service	Ν
Michelle	GCD		30s	F		FI	College	Е	Accountant		Y
Georgina	Houm a	GC	80s	F	C	FI	None	F	Retired	Seafood industry	Y
Marlene	GCD	Bourg	60s	F	С	FI	Some high school	F	Food industry	Seafood industry	Y
François	GCD		60s	Μ		FI		F	Oil	Fisher	Y
Shirell	GCD	Chauvi n	30s	F	С	FI	High school	F	Self- employed	Paralegal	Y
Francis	GCD	Dulac	90s	F		FI	None	F	Retired	Plantatio n worker	Ν
Jesse	GCD	Dulac	60s	Μ		FI		F	Unemployed	Fisher	Ν
Geraldine	GCD	Dulac	60s	F		FI		F			Ν
Jessica	GCD	Houma	30s	F		FI		E			Y
Albert	IJC	Upper PAC	60s	М	С	FI	High school	F	Retired	Governm ent	Y
Chris	IJC	IJC	40s	М	С	FI	High school	F	Unemployed		N
Renée	IJC	IJC	60s	F	С	FI	Primary	F			Ν
Rebecca	IJC	IJC	40s	F	С	FI		F	Unemployed		Ν
Babs	IJC	MS	50s	F	С	FI	Some high school	Е	Unemployed		Y
Victor	IJC	MS	60s	Μ	С	FI		F	Fisher	Fisher	Y

⁹ Affiliation: GCD = Grand Caillou Dulac; IJC = Isle de Jean Charles; PAC = Pointe-au-Chien; TLCD = Terrebonne Levee and Conservation District; USACE = U.S. Army Corps of Engineers; CPRA = Coastal Protection and Restoration Authority; BTNEP = Barataria Terrebonne National Estuary Program

¹⁰ Location: GC = Grand Caillou; IJC = Isle de Jean CharlesUpper PAC = Upper Pointe-aux-Chenes; Lower PAC = Lower Pointe-au-Chien; MN = Minnesota; MS = Mississippi

¹¹ Sex: F = Female; M = Male

¹² Religion: B = Baptist; C = Catholic

¹³ Ethnicity: FI = French Indian; Cauc = Caucasian; AfroAmer = African American; AmerInd = American Indian

¹⁴ Primary Language: F = French; E = English

¹⁵ Relocate: Y = Yes; N = No

Gabrielle	IJC	Houma	20s	F	С	FI	High school	Е	Government		Y
Regina	IJC	IJC	60s	F	С	FI	Primary	F	Unemployed	Food industry	N
Charles	IJC	IJC	60s	М	С	FI	Primary	F	Unemployed	Food industry	N
Henri	IJC	Grand Bois	50s	М	С	FI	High school	F	Park manager	Food industry	Y
Josette	IJC	Grand Bois	50s	F	С	FI		F	Park manager		Y
Jean	IJC	IJC	80s	М	С	FI	Seminar y	F	Retired	Church	Ν
Mary	IJC	Upper PAC	70s	F	С	FI	Primary	F			Y
Joseph	IJC	Upper PAC	70s	М	С	FI		F	Retired	Fisher	Y
Pierre	IJC	IJC	80s	Μ	С	FI	Primary	F	Retired	Fisher	Ν
Louis	IJC	Houma	80s	М	С	FI	5	F	Unemployed		Y
Maurice	IJC	Homa	60s	М	C	FI	High school	F	Oil		Y
Alphonse	PAC	Golden Meado W	80s	М		FI	None	F	Fisher	Fisher	Y
Olivia	PAC	Golden Meado W	70s	F		FI		F	Retired	Fisher	Y
Pascal	Houm a	Lower PAC	60s	М		FI	Primary	F	Fisher	Fisher	N
Liz	Houm a	Lower PAC	60s	F		FI	High school	F	Fisher	Fisher	N
Serena	PAC	Bourg	20s	F		FI	College	E	Accountant		Ν
Marianne	PAC	Lower PAC	70s	F	В	FI	College	F	Teacher	Teacher	N
Paulette	PAC	Bourg	50s	F		FI	College	F	Teacher	Teacher	Y
Chuckie	PAC	Monte gut	50s	М		FI	High school	F	Tugboat Captain	Fisher	Y
Madelein e	PAC	Monte gut	70s	F		FI	Primary	F			Y
Antoine	PAC	Lower PAC	70s	М	В	FI	Primary	F	Fisher	Fisher	N
Patrick	PAC	Monte gut	40s	М		FI	Primary	F	Tugboat	Fisher	Y
Nicholas	PAC	Lower PAC	40s	Μ	С	FI	Primary	F	Fisher	Fisher	N
Frances	PAC	Lower PAC	60s	F	В	FI	Some high school	F	Domestic	Fisher	N
Donald	PAC	Lower PAC	50s	М	С	FI	Primary	F	Fisher	Fisher	N
Theresa	PAC	Lower PAC	50s	F	С	FI	Some high school	F	Church	Fisher	N
Sophie	PAC	Lower PAC	70s	F	С	FI	Primary	F			N
Audrey	PAC	Monte	40s	F	В	FI	College	Е	Teacher	Oil	Y

		1	1		1	1		1			1
		gut								industry	
Patricia	PAC	Lower PAC	50s	F	В	FI	Some high school	F			N
Simone	PAC	Lower PAC	50s	F	В	FI	Some high school	F			N
Diane	BISC O	Thibod aux	50s	F		Cau c	College	F	NGO		
Reggie	TLC D	Upper PAC	50s	М	С	Cau c	College	F	Government	Governm ent	
Jack	Resid ent	Upper PAC	80s	М	С	Caj un	High school	Е	Retired	Real estate	Ν
Rodney	USA CE	New Orlean s	40s	М		Afr o- Am er	College	Е	Consultant	Governm ent	
Jerome	CPR A	Baton Rouge	50s	М		Cau c	College	Е	Government		
Kerry	BTN EP	Thibod aux	50s	М		Cau c	College	Е	Government		
Jaden	Fond du Lac	MN	40s	F		Am erIn d	College	Е	Tribal Council		
Sylvie	Eyak	Alaska	50s	F		Am erIn d			Tribal Council		
Sonja	Resid ent	Upper PAC	60s	F	С	Caj un	High school	F	Tourism		N

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