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“… NEXT TIME”: GULF COAST RESIDENTS’ RELATIONSHIP WITH HURRICANES

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“... NEXT TIME”: GULF COAST RESIDENTS’ RELATIONSHIP WITH HURRICANES

by

ROBERT L. LLOYD

Under the direction of Dr. Kathryn A. Kozaitis

ABSTRACT

This thesis examines how residents of the US Gulf Coast conceive of, prepare for, respond to, and recover from hurricanes, an environmental reality they face annually. The project employs personal narratives of hurricane survivors from coastal Mississippi and Louisiana, drawn from ethnographic interviews as well as historical accounts. Interpretation of museum exhibits, memorials, and displays of symbology and landmarks is also used. These data are analyzed through the literature of theory and findings on disasters, religious and secular responses to them, and human relationships to place. I conclude that Gulf Coast residents accept hurricanes as natural facts of life in an area to which they feel strong personal and community ties. They rely on experience and bonds formed by local and religious communities. Furthermore, hurricanes and survivor experiences are incorporated into self-identity and sense of place, familiarizing the storms while also maintaining awareness of them.

INDEX WORDS: Gulf Coast, Hurricanes, Environment, Place, Risk, Remembrance, Resiliency
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“... NEXT TIME”: GULF COAST RESIDENTS’ RELATIONSHIP WITH HURRICANES

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Office of Graduate Studies
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Georgia State University
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Dedication

For the unidentified victims of Hurricane Katrina,

interred in the New Orleans Hurricane Katrina Memorial

at 5056 Canal Street.

Though unknown, you are not forgotten.
ACKNOWLEDGMENTS

First, I thank the man who got me started on the journey toward anthropology more than 17 years ago as a smiling face poking out of a classroom door at Monroe Community College. My friend and mentor, Dr. David Day, literally taught generations of students how to begin understanding humanity. Though he is retired now and 1000 miles away, I still employ those early lessons, and strive to build on them.

Every professor that I have had at Georgia State is a gem, helping me to understand challenging new material and to see the familiar in a new light. My advisor, Dr. Kathryn Kozaitis, was both encouraging and exigent. She was instrumental in focusing what started as a grandiose and formless idea into something manageable with a clear direction. The rest of my committee has been equally invaluable. Dr. Jennifer Patico provided her insights before I even formally recruited her to serve as one of the readers. Dr. Emanuela Guano actually asked to be part of the committee, providing a strong sign that I was on an interesting track.

Although his name was not on the committee form, Dr. Brent Woodfill was a key player in the production of this work from start to finish. It was the Katrina unit in his class that inspired me to look even more closely at that disaster and the world of human stories connected to it. Once I began thinking about building a thesis project around Gulf Coast hurricanes, he pointed me to the field site. His father was my first contact there. Finding my way into a receptive Gulf Coast community would have been much more difficult without his help.

I was immensely lucky to have an astoundingly intelligent, welcoming, and supportive cohort of fellow anthropologists at GSU. Spending time and sharing ideas with other graduate students was a highlight of every day. I am proud to call them colleagues and friends.
My family has been encouraging as it has been all my life. Special notice must go to my dad, Robert L. Lloyd Sr., who reminded me, ten years after my BA, that graduate school would not get any easier as I got older, so I had better get on with it.

Candace Young remained a patient and caring partner through four semesters and a summer, including long trips away from home and during late nights while I stayed locked in my room studying and typing madly. She often delights in telling me that she is more than I deserve. The truth is that she is right.

Many, many people in New Orleans, Bay St. Louis, and Waveland welcomed and assisted me in this project, even though they were not official ethnographic participants. I am especially grateful to Kathy Pinn, director of the Ground Zero Hurricane Museum in Waveland, Brent Woodfill Sr., who provided my introduction to St. Clare Catholic Church, and the staffs of the Waveland and Bay St. Louis Public Libraries, who allowed me to use meeting rooms to conduct interviews and to camp out doing local historical research.

Naturally, enormous thanks go to Father Michael Marascalco, who expressed both interest in and encouragement of this project, and the congregation of St. Clare, who were so inviting and tolerant of a non-Catholic visitor from two states away asking questions and scribbling notes. “For I was... a stranger, and you welcomed me.” – Matthew 25:35.
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CHAPTER 1: INTRODUCTION

In Waveland, Mississippi, one can take a short walk southeast down Coleman Avenue and immediately view the immensity of the Gulf of Mexico. Actually, thanks to modern technology, one does not even need to be there. One may log into Google Street View, and see that the day is sunny. The sky above is silver-blue and unmarked by clouds. Imagine a warm sea breeze and the call of birds.

Now imagine a different scene. The sky is black with clouds. You are thrashed by wind and rain – wind that is strong enough to knock you over, driving the rain into you like needles. Soon the sea that was a hundred feet away is all around you. You are surrounded by water, water driven by the storm surge and moving too swiftly for a human to resist. It carries you inland, along with sediment and debris. Imagine that water washing over your head as it continues to tumble you into town – into trees and streets and houses, into places where, by normal human reckoning, water should never be. The world as you have known it is being violently rearranged, and your very life is in danger.

For residents of Waveland and other communities along the Gulf Coast, such a scenario is not hard to imagine at all. It is one they face as a possible reality on a yearly basis. It is one that many of them have actually experienced, some of them multiple times. It is normal existence in the part of the Western Hemisphere known as Hurricane Alley.

The question that guides this study is as follows: How do Gulf Coast residents respond to both the impending and, occasionally, the immediate threat of hurricanes? In this work, I explore their lived and anticipatory experiences related to hurricanes, how they prepare for them, and the process of how they have recovered from such environmental catastrophes in the past. Although my study has strong links to disaster anthropology, I am primarily interested in how residents relate to hurricanes as an environmental fact of life on the Gulf Coast: an inexorable reality that cannot be denied, but only avoided by evacuation or, for those that choose not to evacuate, endured. Within the endurance, however, as in the recovery, there is an array of perceptions and expressions of agency, informed by a
diversity of ideologies as well as choices and actions driven by such ideologies. One such ideological factor that is a special focus of this thesis is the role that religious faith plays in conceptualizing hurricanes and giving strength to individuals and communities to recover and rebuild in the wake of the storms. The practice of religious faith through prayer and service to others also plays a prominent role.

This project takes an ethnographic approach, through the use of semi-structured interviews of residents and an extensive review of the literature and audiovisual material, including accounts of Gulf Coast hurricane survivors as well as historical and theoretical perspectives. Given the only loosely predictable nature of hurricanes (not to mention serious safety considerations), direct participant observation of a Gulf Coast hurricane was not possible for this project. However, I have attempted to situate interviewees (my own and those in the literature) as “observant participants,” to borrow a concept from Wacquant (2004:vii-viii) – people who were actually present and were able to articulate their experiences. I was able to conduct a measure of participant observation through my attendance at Catholic Masses (my first ever) held at the church and my primary field site, and at a Hurricane Katrina Memorial Ceremony held at Waveland’s Ground Zero Hurricane Museum on the 11th anniversary of that storm. I visited hurricane memorials in Waveland, in Biloxi, Mississippi, and in New Orleans, Louisiana, through which residents have translated their memories and emotions into long-lasting physical form. I also used the wealth of video footage of Hurricane Katrina in particular (especially as presented in Lee 2006) to see that storm’s progression and devastation almost literally through the eyes of people who were there. Although this approach can never come close to the actual experience of a hurricane, it at least conveys something of the immediate visual and aural experiences of a hurricane.

Through these resources, I intend to convey a picture of how Gulf Coast residents anticipate and prepare for hurricanes, how they think and feel as the storms occur, and their means of coping with the danger of the storms and the chaotic, often materially deprived period of recovery. I discuss the roles of immediate communities (both secular and religious), and of local, state and federal governments: not
only in the response and recovery, but in setting communities up to weather hurricanes in the first place. Finally, drawing on these findings, I provide some insights that I hope will become useful in the preparation for and recovery from inevitable future storms.

Like the formation of a storm, this project began as a mass of vague ideas and reactions before converging and coalescing into a systematic ethnographic study. I admit (to my shame) that I had not paid much attention to Hurricane Katrina and its effects in 2005 – I watched some of the chaos in New Orleans on TV news, but did not register how far, in space as well as time, the consequences extended.

It was not until taking a class in environmental anthropology which included Katrina as a study unit (and happened to coincide with the 10th anniversary of the storm), that I began to look closely at the disaster and the array of human stories of every description connected to it. My interest developed beyond the material presented in class: I was compelled to learn and experience more. Seeing how the intersection of human motivations and actions with environmental matters beyond the strictly meteorological – loss of wetlands, land subsidence from oil and water extraction, soils inappropriate for the types of levees protecting New Orleans – I decided Katrina could make an effective starting point for my own specialization in environmental anthropology. However, finding the right angle was a challenge. So many aspects of the disaster and matters surrounding it were already the focus of intense scrutiny by scientists and other researchers of every stripe.

As I read, watched, and listened further, I increasingly noticed an interesting common thread: the religious responses to the storm and its aftermath. These ranged from the simple prayers for survival that one would expect to find in a disaster to suggestions – by victims of the storm as well as outsiders – that Katrina was some kind of divine retribution. Although the environmental, policy, and planning dimensions of Hurricane Katrina seemed well-represented in the literature, and well-understood by the people involved, no one seemed to focus much on faith as a variable aspect. Even Lee (2006), whose film was one of the first works outside of class readings that really piqued my interest intellectually and
resonated with me emotionally, highlights moments of religious response; however, the film does not investigate religious beliefs in more detail, apparently preferring to let displays of faith speak for themselves. As a person who is not religious, but is nevertheless intensely interested in religion, I wanted to know more.

Through a series of conversations with colleagues and professors – including one who would become my advisor – I arrived at the aim of exploring not just Katrina, but hurricanes in general, through the lens of the religious faith of Gulf Coast residents. I quickly realized, however, that it would be difficult (as well as short-sighted) to investigate religious perceptions of an environmental phenomenon without also gauging people’s more earthly understanding of natural disasters. At the same time, it became clear that talking about perceptions of hurricanes would have to include agency on the part of respondents – they would be likely to have not just ideas about hurricanes, but behavioral responses to them – from preparation to riding them out to evacuating to recovering. As with so many subjects under the anthropological microscope, it was hard to pull on one thread without a few others coming with it. Therefore, I decided to look at Gulf Coast residents’ relationships with hurricanes in general, and allow for a religious component to emerge only where appropriate for a given participant.

Comparing and contrasting different faiths’ particular views on hurricanes could be interesting. However, the variety of individual experiences and perspectives found in any large group of people would generate a good deal of diverse responses – different individuals might be more or less devout than one another, or happen to be more or less likely to fall back on a religious response to disaster, or even to specific aspects of a disaster. Therefore, I chose to work through one particular religious congregation in one particular Gulf Coast community. Mine is a case study in hurricane perceptions based on a small sample of Gulf Coast residents – in particular, an instrumental case study, in which the case itself works in support of an understanding a larger set of issues or questions, as per Stake’s definition of the term (Stake 1994:237). Although this work employs a limited body of participants,
drawing on their memories of discrete past events, patterns revealed by their narratives, and connections of those patterns to those found in other work on related subjects, may be synthesized to make some general observations about how people feel about and address life in a hurricane zone.

In addition, I have a strong interest in the application of the study findings to community-based and strategic preparations for future hurricanes. Despite my goal of scientific objectivity, it was impossible to read accounts of Katrina and not be moved emotionally and motivated ethically: I sympathize with the terror of people fearing for their lives and the despair of having homes and loved ones lost forever; I was angered by the incompetence, intractability and corruption of public officials and agencies; I was buoyed by the hope for rescue and redress. Therefore, I sought to find some way that insights from this project could be used, by Gulf Coast residents and others, to improve preparation for, response to, and recovery from inevitable future hurricanes.
CHAPTER 2: HURRICANES: ACTS OF GOD, ACTS OF HUMANS

This project is more than an intellectual exercise in disaster anthropology. Likewise, it would be unfair to define the region of my study, or its people, only by the “disaster” aspect of this research. Nevertheless, it is an appropriate place to start. My review of the literature has identified some key themes that illuminate the nature and culture of hurricanes as environmental disasters. As Oliver-Smith notes, natural disasters are not only the result of powerful ecological forces, but for humans are in fact ultimately social phenomena (Oliver-Smith 2002:24). We certainly see this play out in the ways humans conceive of disasters, and it is certainly exemplified in the perception – in the eyes of sufferers as well as observers - of a force such as a hurricane potentially being a tool of divine intervention. It could even be argued that a perception of a storm being “only” the result of natural forces can only be reached by reliance on scientific understandings, rooted in philosophies that stem from the Enlightenment and by no means universal in the postmodern, globalized world. In addition, the reactions of people to disasters are at least partly socially constructed (though certainly, individual psychology will play a part as well.) In an area where the threat of disaster recurs cyclically, such as in a hurricane zone, residents are likely to have received information about how to prepare, and what actions to take to avoid injury and fatality. Such information may be passed down vertically, through generations, as well as laterally, within one’s one generational group. It may be shared between peers; come from official actors, such as government authorities; or come from any of a variety of media outlets. Depending on the social group in question, it may very well come from a mixture of sources.

Perhaps even more fundamental is the way social forces such as politics and economics position humans to be affected by natural disasters in the first place. For instance, populations will tend to aggregate in large, comparatively wealthy cities, the founding of which may predate current awareness of hazards present, such as weather patterns or geological faults. A city in a hurricane zone may have been established years or even decades before a hurricane actually struck that community, or before
weather records could be assembled and analyzed showing the prevalence of such storms in the overall geographic area. People are drawn to such areas by the promise of jobs, interpersonal connections, and leisure, and may enjoy life there for some time before becoming aware of the danger they are in. Alternatively, people in rural areas may suffer reduced access to social services, including emergency response, due to the depopulation of these areas and the diminishing tax income, as businesses that once offered employment relocate, replace workers with automation, or simply fail. Meanwhile, infrastructure in human habitation areas—whether urban or rural—that could reduce exposure to hazards may be planned and executed in ways that favor the wealthy and powerful, or that are based on inaccurate science, or for which adequate funding is not available. This is not, of course, to discount individual choice and action, but one must acknowledge that individual decisions and their consequences are themselves often shaped by external influences—particularly global, large-scale economic and political forces, and national socioeconomic and political structures and institutions. A major component of these processes is a given society’s conception of, and relationship to, “nature.” Oliver-Smith makes a point of highlighting this dynamic as it manifests itself in modern Western society, where the relationship between society and nature is not only dualistic but also exploitative: “Nature has been conceived as a fund of resources that human beings not only have a right to dip into, but also a right to alter and otherwise dominate in any way they deem fit” (Oliver-Smith 2002:31). Our built environment is one outcome of this: communities are often not only positioned so as to make the most convenient use of environmental features, but also reshape the earth itself in doing so. Moreover, the physical layouts of these communities often reflect and perpetuate social structures and relationships that place the communities themselves, and certain social groups within them, under varying levels of threat. Through conceptual practices (such as urban planning,) as well as more obvious physical ones (such as construction and transportation), the immaterial social relationships and attitudes between people, institutions, and the natural environment are made material through the reshaping of that
natural environment and the emplacement of humanmade features. (Oliver-Smith 2002:36) This often also equates to the replacement of natural features which served environmental functions – for instance, levelling a woodland to build a parking lot, thereby destroying wildlife habitat, removing oxygen-producing vegetation, and increasing stormwater runoff.

Ulrich Beck suggests that, even beyond culturally informed attitudes, the mechanisms of the modern world themselves work together to create a “risk society.” In this model, exposure of the populace to increasingly dangerous elements is a necessary function of the economic systems on which that populace depends but are, paradoxically, exploited and often harmed by (1992:19-24). Although Beck largely invokes toxic pollutants in his analysis (24-26), it is easy to extend his idea to natural disasters. For instance, a complex of scientific, industrial, and economic human actions create substances like DDT and use the goods and services market to introduce them into the environment shared by humans and other organisms, exposing us and them to chemical risks. To reframe that model in line with another dimension of risk, demand by developers for land for habitation, commercial, and industrial uses, and the subsequent offering of developed areas to consumers, can lead to humans being positioned, relatively permanently, in areas that might seem ill-advised, such as around seismic faults or, for purposes of this project, in hurricane zones. This process may be abetted in the case of natural disaster areas by the fact that although they may be more likely to happen in certain areas, there is no immediate guarantee that they will, or of when they will, or of exactly how damaging they will be when they do occur. As Beck notes (33-34), the promise of risk can be an instigator of action of the parts of the populace as well as more powerful officials and agency, but at the same time the diffuse nature of some threats, like natural disasters, may lower the sense of the immediacy of danger and retard action.

Colten (2005) shows exactly how the processes described by Oliver-Smith and Beck can play in an analysis of the history, layout, and engineering of New Orleans that proved to be prescient. Colten describes the creation of that city as a struggle against nature, and shows how planners and engineers
transformed the local landscape and walled back massive amounts of water in an ongoing process of constructing and maintaining a city that nevertheless seems vulnerable at any time to being drowned. As a result (and as Hurricane Katrina would show), this put the city, and its inhabitants, in a precarious position. However, the process has also had profound effects on the ecosystem still surrounding and permeating the city. Besides this, urban growth in New Orleans also had tremendous social implications, which has resulted in at least some measure of the racial and class-based segregation found in the city today, and which ultimately caused some residents of the city to be disproportionately affected by Katrina. With the tragic benefit of hindsight, people analyzing the effects of Hurricane Katrina on New Orleans, as Boyer (2015:223-225) does quite demandingly, can see exactly how the interplay of ecology, politics, economics, and policy worked over time towards the sequence of tragic events the world watched play out there in 2005. These configurations are intimately connected with the concerns of anthropology. Integral to the creation, growth, and longevity of New Orleans was the idea of land, water, and other natural features as subject to human will, elements that could be tamed with the right combination of ingenuity and force, similar to initiatives of urban development. This echoes Oliver-Smith’s observations about culturally transmitted and embedded attitudes towards the environment taking on physical manifestation through the aggressive remodeling of that environment. Granted, it could be argued that this largely utilitarian attitude towards the land and natural resources has begun to erode with the rise of ecological knowledge and the environmental movement. Nevertheless, it persists among more conservative political and social elements in Gulf Coast communities and states, as well as in the cultural mainstream of the United States (Colten 2005:187-191). Ironically, these elements also tend to be opposed to the application of government regulation and funding in addressing the demands of environment – a factor that Colten highlights particularly in the area of urban flood control. This feature is not only vital for communities at low elevations and close to the sea, like New Orleans, but directly relevant to human preparation for, and response to, hurricanes and similar storms (Colten
The feedback response on view here – of ecology influencing human decisions and actions, and those human actions and their often profound and far-reaching effects in turn influencing the ecology, is an important theme of this work.

Religion also comes into the mix, predictably, since most humans follow one faith or another, or even blend multiple ones. Boyer references this trope, noting the irony of then-President Bush referring to Katrina as “an ‘act of God that no one could have foreseen” (2015:226), despite the abundant information on the planning decisions, bureaucratic shiftlessness, and other economic, political, and social factors that contributed to the disaster. It might be easy to write off “act of God” as insurance industry-speak or a simple linguistic convention (President Bush’s own Christian faith notwithstanding.) However, the injection of religion as a cause, or at least an interpretation, of disasters is a common one in the United States. It permeates the film “When the Levees Broke” (Lee 2006), a major inspirational source of experiential accounts that informs this project. Throughout the film, religious imagery and appeals abound: an outdoor, life-size crucified Jesus; a graffito imploring, “Restore us O Lord God of hosts;” prayers; a church funeral. Religion was also a factor after Hurricane Katrina, as religious groups (Dyson 2006:179-181), and even then-mayor of New Orleans Ray Nagin, suggested that the hurricane was an instrument of God’s wrath against the United States for an array of local, national, and global misdeeds (Brinkley 2006:618). In fact, as Steinberg notes, such talk has come up numerous times in the rhetoric about hurricanes. He looks in particular at South Florida, a region with ecological conditions similar to those of the Louisiana/Mississippi Gulf Coast and provides accounts of how rapacious development there in the early 20th Century, enabled by government policies, set up communities to suffer unduly from one destructive hurricane after another. Steinberg’s analysis here mirrors Colten’s and Boyer’s perspectives of New Orleans. However, Steinberg also notes the efforts of politicians to lend religious shadings to the discourse: “Gov. Austin Peay of Tennessee viewed the hurricane as a form of retribution meted out to Floridians who had lost ‘their hold on religion and law’” (Steinberg 2006:55), a
claim echoed by Florida Governor John Martin. This pattern re-emerged in Florida in 1935, when another storm killed 400 residents. In his discussion of that disaster, Steinberg singles out the railroad magnate Henry Flagler, whose practice of building filled causeways connecting the Florida Keys to each other and the mainland eliminated natural water flows. As he notes, “The practice of filling in between the islands had bottled up the water between the keys and the mainland, which increased the intensity of the damage and ultimately washed hundreds of people out to sea” (Steinberg 2006:66). In both cases, informed voices – including those of some religious leaders – spoke out accusing officials of attempting to transfer blame to a deity who could not be sued or drummed out of office, and also of trying to absolve developers for their role in transforming the landscape in ways that not only placed more people in hurricane-prone areas, but further increased risk by erasing natural features that mitigated their damage.

A religious response to disaster can sometimes be maladaptive, keeping people from recognizing the earthly causes that lead to disasters. However, it can also be adaptive, as Chan et al. show in their study of religious female survivors of Hurricanes Rita and Katrina, which found disaster recovery value in the optimism and sense of purpose offered by adherence to a religious faith (2011:174-178). Wessinger highlights both types of responses, applying the term “negative religious coping” to the trope of seeing disasters like Katrina as punishment from God. This is in contrast to “positive religious coping,” which can be applied to people taking comfort in the promise of God helping them through the crisis, or in faith bringing people together to help one another and others. Overall, she notes, positive coping overall appears to be more successful than negative coping. Connected to these concepts, she also references ideas of “punitive theodicy” which, like negative religious coping, sees disasters as divine punishment, and “attributive theodicy”, which ascribes disasters to human agency, along with, in her analysis for disasters like Katrina, natural forces (Wessinger 2012:57). These four concepts may work in tandem, which was certainly the case with Katrina. Dyson also examines questions of theodicy in Katrina, and
seems to find it more problematic, noting that theodicy “has often discouraged tangible engagement with practical problems” (2006:192). However, he also invokes another dimension of the concept: redistributive theodicy, which compels believers to examine their own role in human suffering and its causes. This, too, could serve as an adaptive religious response, if it drives people to address the human factors of natural disasters and work to alleviate them. Some responses have no problem blending the roles of divine protection and human agency. One example particularly notable for this study notes that “Catholic Masses regularly include prayers to Our Lady of Prompt Succor for protection from hurricanes.” When asked how effective this had been before Katrina, Wessinger notes that one worshipper responded, “‘She spared the city from natural disaster. The levees weren’t her domain,’ thus placing responsibility for the disaster on the U.S. Army Corps of Engineers.” (Wessinger 2012:61) Attributive theodicy in action, certainly, but also an example of the diversity and, often, texture to be found in religious responses.

Wessinger’s and Dyson’s examinations of religious coping and theodicy focus on New Orleans. However, pointing to the relative generality of these modes of human response, we can see similar dynamics happening to the east, in Mississippi. For instance, Hayden paints a picture of pre-Katrina Mississippi as being socially divided between the coastal areas and the rest of the state north of Highway 10, which runs along the southern border of the state, close to the coast. Depending on whom she would talk to, she writes, residents from the “other” part of the state (relative to the location of a given respondent) would be seen as “different, of questionable political, moral, or social character; socially either too liberal or too conservative” (Hayden 2010:184). In many ways, Mississippi could actually be seen as two different states. Katrina would prove to have a unifying effect, though. In large part this was due to the extent of the damage across the entire southern half of the state, in which forty-nine counties were declared disaster areas (Hayden 2010:188). However, in Mississippi the damage was also seen as being far more ecumenical in terms of social and economic classes affected
than in New Orleans. These factors were accentuated by the portrayal of the damage by government authorities. For instance, maps of the damaged areas portrayed the counties affected without reference to the Highway 10 divider or other social division in the state. According to Hayden, Katrina: “… re-incorporated the Coast into Mississippi and Mississippi into the nation by narrating the leveling of difference and a coming together of a community of self-reliant citizens.” Self-reliant, particularly as contrasted the people of neighboring Louisiana, who were widely perceived in Mississippi as being more in need of, as well as expecting, outside aid (Hayden 2010:189-190).

Hayden’s piece powerfully shows the ability of narrative to shape and direct the response to a natural disaster. Narrative, and the symbols it employs, proves to be a major player in the recovery process. Stories about a disaster can help provide an explanatory framework and make connections between survivors. Hoffman suggests the power of symbols when applied to disaster runs even deeper: where a disaster has destroyed human ideas of order, symbology helps restore them. The disordered world begins to become meaningful again through the applications of symbols - symbols of place, of identity, of power, of faith, of hope - virtually anything and everything that people in the situation find meaningful (Hoffman 2002:115). Also, symbols can serve to objectify the disaster, “defanging it,” as Hoffman puts it (2002:119). This, too, is an important part of the recovery process: what can be made less dangerous can be overcome. Features in the ethnographic material of this project will indicate this at work in my field sites. I will show how individuals and communities respond to hurricanes not only immediately, as they occur, and through rebuilding in the aftermath, but symbolically, through the incorporation of meaning into their sense of the places, and their identity.

It would be reductive to examine Gulf Coast communities only as the site of hurricanes, or as the arenas of political and economic machinations that put humans at risk. For residents, they are also homes – the places they connect to more strongly than to any other. But “person” and “place” need not be seen a strict binary of bounded entities. It can be argued that physical space only becomes “place”
when given identity and value by human habitation of and responses to it – and such has been argued, extensively, as Casey notes (1996:14). However, the process can work the other way as well. “Place” may only be constituted by human presence and activity in a space, but features of the space will also invite (or repulse) human presence to varying degrees, and inform the activities and reactions of humans within it. For instance, the overall warmth of the Mississippi Gulf Coast will tend to induce a very different set of activities and reactions than, say, the Arctic. Over a long enough period of habitation, these will become deeply embedded parts of the normal lived experience of the people in those environments. Place, then, is created not just by human presence and thought, but by the actions of “lived bodies.” Casey maintains also that place and identity – personal as well as communal – support each other in a constant positive feedback loop: people may create places, but places in turn guide and shape the perceptions and experiences of the people that live in and pass through them (1996:24).

Furthermore, beyond just their creation as places, home regions will exert greater power over the lives of the people who make them up. Although people can recognize “place” even in places unfamiliar to them personally, “home” distinguishes itself as a construct of the repeated actions, and interactions, particular to the places, and the specific environmental and cultural conditions of those places, that are most familiar to a person and the immediate social groups of which they are a part (Terkenli 1995:325-326). Sometimes, however, the power of that familiarity only becomes clear once it is taken away – when home is replaced with non-home (Terkenli 1995:327). It stands to reason, then, that the disarrangement of the familiar features of a place, such as by a powerful force like a hurricane, may in turn have a powerful effect on the psyche of the people connected to that place. Smith notes as much in his history of Hurricane Camille (2011:4-5), as does Hoffman in her account of a firestorm that devastated her own community (2002:123-124), and this is also expressed in the ethnographic accounts. Through them, I will show how hurricanes can cause not only physically disarray, but also mental and emotional disarray through their rearrangement of places called home. Nevertheless, for many
residents, the ecological features of home may as easily be the source of a powerful connection as the social dimension and the humanmade physical features that are the outgrowth of cultural and social relationships (Holmes 2003:25-31). I will show through the ethnographic accounts and my other fieldwork findings that this may be true even of hurricanes, even if they are often associated with disorder and destruction.

The power of place, and of the identities and interconnections of the people that live in and constitute places, characterize the recovery from Hurricane Katrina. Efforts to rebuild were not only physical, but also social and spiritual. Wooten examines how even as powerful forces at the city level were conspiring to rebuild New Orleans along the lines of more modern urban planning concepts, neighborhood groups organized to effect repairs to homes and other buildings immediately, and to maintain, as much as possible, the existing populations of their neighborhoods. The idea, in short, was that recovery must not force people out of their homes or change the characters of smaller communities within the larger city that had maintained themselves for decades or longer. A good deal of this organization took place through the existing solidarity and connections of church congregations and other religious groups (Wooten 2012:20). Wooten spotlights the power of group identity and the movement to decentralize governance, returning power to the hands of relatively small groups for whom the stakes of success or failure are high as well as readily apparent, and contrasts the success of the smaller, grassroots groups against the political logjams of state and federal efforts (2012:29-66).

Despite this success, however, it could be seen as a triumph of neoliberal politics – among them the idea that government is oppressive and inefficient - that Boyer identifies (2015:226-228) as undercutting an agreed-upon need for large-scale investment in the safety of US cities to prevent further disasters like Katrina. The rhetoric of exactly how best to channel and employ the power of community in these situations is, then, a textured and nuanced one.
It might seem that suppressing memories of a traumatic experience like a disaster would be more conducive to recovery – indeed, for certain people, it might. There are indications that as much as physical rebuilding and community connections and identity foster recovery from a disaster, memory, too, plays a part – both individual memory and shared memory. As Lewicka notes, not only does memory – of features of a place, of people in a place, of experiences shared in a place – help create place attachment in the first instance, but displays of shared history help strengthen that attachment (2014:51-54). Addressing the power of memory helps to ensure that the lived experiences of a community – which, again, turn a simple group of humans into a community - are neither forgotten nor ignored. Dawdy’s efforts as an archaeologist to help New Orleanians process the loss of large elements of their physical space – and thus, to follow Casey’s reasoning examined earlier, a certain loss of self – highlights the power of collective experience and agency in recovery. For the people with whom Dawdy worked, devastated areas of New Orleans were not simply spaces filled with junk to be disposed of, but parts of a beloved home containing the material components of their very lives. In these cases, then, the emotions of the people involved were at least as meaningful in creating the archaeological record as the ecological forces involved as well as the human efforts to control and respond to them (Dawdy 2006:722). Another factor in this process was the anxiety (not unfounded, since certain planners actually proposed it) that some residential areas would be reclaimed by the city and transformed into parks and other greenspace. Such proposals were representative of both Boyer’s analysis of plans of economically and politically powerful forces calculating transformations of the city without necessarily involving the populace, and Wooten’s accounts of neighborhood groups organizing to challenge such efforts. Hoffman also notes the determination of people to return the area of her firestorm “to the garden it was” as a factor in overcoming loss of place, and of the creation of memorial “shrines,” “altars,” and “chapels” as loci for people to process their grief (2002:123). Hoffman’s use of religious terms for these memorials is notable given the particular interest of this project in religious responses to disaster. Even if the intent of
the memorials was purely secular, or at least not explicitly religious, the power of dedicated – “sacred” – space and ritualized expressions of memory to aid in recovery is apparent.

In Waveland, Mississippi, meanwhile, the situation was somewhat different but in some ways more dire. Although New Orleans suffered huge loss of life, property damage, and extended strife and deprivation due to the long period that floodwaters remained, large portions of the physical structures remained to be renovated afterwards. In Waveland, destruction dealt to structures was widespread and largely total. The loss of 95% of homes and 100% of businesses not only resulted in extreme and extended impacts to lifestyle and economy, but in fact erased the physical manifestations of place, leaving only the social connections and memories – individual and shared – of the inhabitants. Other than the earth itself, for the most part only intangible foundations remained upon which to rebuild community – new buildings could be constructed in the space, but only the history of Waveland, maintained in the minds of residents, could turn it back into place. In this case, therefore, lived experience was exponentially more important than in many other communities in the area that, no matter how severe the actual post-storm conditions may have been, were by some measures better off by virtue of having more physical markers of place remaining to aid the cognitive and social processes of rebuilding (Bradford and Loebenberg 2014). Bradford, a young and lifelong resident of Waveland, contributed her own autoethnography for her piece with Loebenberg, and ruefully notes that her generation will likely be the last to remember Waveland before Katrina.

Memory also proves its value in the expectation of, and preparation for, future disasters. The cyclical nature of anticipated hurricanes both promotes and hinders this process. For instance, assuming that the possibility of hurricanes does not compel a person to move away from a hurricane zone altogether, an experience with a powerful and destructive hurricane can influence one to make plans (such as saving money for evacuation), and acquire goods (such as a generator, stores of nonperishable food and water) to help mitigate the effects of future storms. However, time, as well as a series of “false alarms”
can reduce perception of hurricane risk, as Trumbo et al. found in their work among Gulf Coast residents (2013:1017). This being the case, they suggest that greater effort should be made to reinforce the potential and somewhat unpredictable dangers of hurricanes when they do occur, and to encourage preparedness (Trumbo et al. 2013:1022). Studies by Stewart arrived at similar findings: Gulf Coast residents, even those with hurricane experience, may misunderstand and underestimate the threat of the storms (A. Stewart 2011:122-123). It is startling to think that even in such a media-saturated time, and so soon after two major hurricanes, perception of real threat might ebb, apparently so easily.

Memory of a natural disaster, when combined with knowledge of the human factors involved in creating it, can lead, and has led, to action to address those factors. For instance, the push for legal and other means of addressing the role of powerful governments, corporations, and individuals that influence these matters can be seen in the arena of environmental justice initiatives. Although the term “environmental justice” – a set of policies and interventions to ensure equitable distribution of environmental resources and safety to protect minorities and other disfranchised groups – has been around for a few decades, “climate justice” is a new manifestation. It represents efforts to legally address the greater exposure of economically and politically vulnerable or marginalized groups to climate related hazards, especially as exacerbated by anthropogenic climate change. Zaitchick quotes a Gulfport activist who survived Katrina and who also references another recent Gulf Coast environmental disaster with even more explicitly human causes: “Katrina and the BP spill exposed a social, environmental, and human rights crisis zone across the Gulf Coastal plain” (Zaitchick 2015:31). This movement reflects not only a new dimension in environmental activism, but a growing awareness among these communities of the ecological facts of their regions and the threats to them, and the need to organize in their self-defense. There are indications that lived experiences with disaster forcefully draw attention to environmental realities that might previously have been hidden or obscured by the imposition of human categories as well as physical structures (Walters et al. 2013:922). In some cases,
this leads to a greater degree of engagement in civic environmental action (Walters et al. 2013:931). Place attachment may also play a role in driving individual and community efforts to address environmental issues, as well as to engage in community improvements, post-disaster reconstruction efforts, and other “place-protective behaviors” (Carrus et al. 2014:154-157). This draws a line back to the disaster anthropology studies discussed earlier, as well as the activist successes related by Wooten (2012), and a significant degree of informed agency on the part of people on the ground, in contrast to the more top-down models favored in some analyses, which may obscure or outright ignore the role of the general population. Similarly, responses to hurricanes along the US Gulf Coast include not only fear, pleas to religion, or even solidarity in the face of threat, but also basic understanding of the innately social causes of these events as “disasters,” and of their consequences.
CHAPTER 3: ETHNOGRAPHY OF HURRICANE SURVIVORS ON THE GULF COAST

This work was driven by one overarching question: How do Gulf Coast residents respond to both the anticipatory and, occasionally, the immediate threat of hurricanes? To build on this inquiry, I investigate how the residents of a Gulf Coast community manage the expectation of and preparation for the possibility of these storms during the annual hurricane season. How do they react and respond when one occurs, and how do they recover afterwards? Because of the prevalence of appeals to the divine found in the many personal hurricane accounts, of particular interest to me in exploring this question is the religious dimension relative to hurricanes: how, if at all, does one’s faith influence interpretations, emotional states, and behavioral responses to these disasters?

Part of the challenge in pursuing answers to these questions is that although certain areas may be prone to hurricanes, the storms themselves are relatively singular events. A community may go years or decades without experiencing one, and each has its own path, characteristics, and effects. Meanwhile, even within a hurricane zone a storm may occur ‘over there’ – in another community, state, or even country - but not ‘here.’ Also, they may occur on relatively short notice, and very real safety concerns may preclude a researcher heading into the path of one. For example, during the time of my fieldwork (2016-2017), no hurricanes threatened the US Gulf Coast, particularly the area of my field site. Hurricane Matthew toured the East Coast in October 2016, and might have provided an instructive parallel experience, but Georgia quickly closed I-16 East as it approached Savannah, quashing my probably ill-advised ideas about heading there to experience that storm. Therefore, “participant observation,” normally the mainstay of cultural anthropology, is an unpredictable and potentially dangerous venture where hurricanes are concerned.

A key component of my research constitutes written and recorded accounts of Gulf Coast hurricanes by those who had been through them. However, I also conducted my own ethnographic investigations directly with Gulf Coast residents who had experienced a hurricane. I knew ethnographic interviews
would give me substantial, in-depth, and textured material to work with. An ethnographic research strategy also allowed me, the researcher, to guide discussion to a certain extent in the direction of my specific research questions. I employ a semi-structured interview guide, using a long list of questions to help guide the interviews. This list served as a valuable reference for keeping the conversation on track, but still allowed for a certain amount of free association provides valuable background material about the field site and associated culture, sensory experiences of hurricanes and their aftermath, and locals’ emotional and religious responses. Additionally, unstructured interviews allowed interviewees to make their own conscious and unconscious associations between various events and feelings.

With a data collection process prepared, selecting an appropriate field site was the next task. The field site of this study is Waveland, a small town, only 6.8 square miles in area, and with a population of 6,435 as of the 2010 US Census. It served for decades as a resort area (Scharff 1999:298), particularly for New Orleans residents who kept summer homes there. It still maintains that feel, with its concrete pier frequently used by anglers, a beachside walking path, and a prohibition on beachfront commercial building (http://www.waveland-ms.gov/about.html, “About Waveland”). Waveland turned out to be both notable and highly appropriate as my research field site, as it is widely considered to have been “Ground Zero” for Katrina (Monti 2015) – the community in which the hurricane actually made landfall, though it did hit some much more lightly populated portions of Louisiana first (Brinkley 2006:133.) Although the effects of Katrina in New Orleans were dramatic, Waveland was virtually decimated by the storm (Smith 2012:35). Many of the aforementioned beachfront houses are in fact new construction, replacing ones destroyed by Katrina’s wind and storm surge. A number of lots are still vacant, though many of them have signs advertising sale of the property.

One of the buildings destroyed, and since rebuilt, was St. Clare Catholic Church, where my first contact, the father of a university professor of mine, was a member of the congregation. Working with the congregation of that church allowed me to operationalize the religious aspect of my research.
Drawing participants from it ensured that they all had some similarity in belief and practice, aided by the relatively specific and formalized nature of Catholicism. Working with a Catholic congregation was also appropriate as that faith is fairly highly representative of the areas hardest hit by Hurricanes Camille and Katrina. Although Catholicism is most associated with New Orleans and southern Louisiana (Wessinger 2012:54) it also maintains a strong presence in coastal Mississippi (Hayden 2010:184). I contacted the pastor, Father Michael Marascalco, who encouraged the project, invited me formally via a letter to work with the congregation for the study, and kindly allowed me to post recruitment fliers at the church. During a short meeting we held, Father Marascalco indicated that the congregation consisted of “about 350 families.” I figured that a group that size would provide more than enough candidates to reach my desired maximum of 25 participants. This was the pool from which I drew my study participants.

I set a few firm criteria for the selection of participants. Besides being part of the St. Clare congregation, all participants are adults over the age of 18. Participants are natives or residents of Waveland or another nearby Gulf Coast community who have lived there for at least five years. Accordingly, all participants are relatively well established as Gulf Coast residents. In addition, they all have experienced a hurricane, either while living there or elsewhere.

I prepared a recruitment flier for posting at the church. A few participants responded directly to it quite quickly. Another informant was referred to me by the first participant, and agreed to participate immediately once I approached him during a volunteer shift at Waveland’s Ground Zero Hurricane Museum. During subsequent visits, I attended Masses at St. Clare with the aim of meeting more potential participants. Father Marascalco made a point at the end of each of these Masses to introduce me to the congregation and to describe my project. As a result, a number of additional churchgoers approached me after Mass and arranged to participate in my study.

I established a reasonable level of rapport with each participant relatively quickly, largely through simple preliminary conversation: small talk about the weather and my impressions of the community.
brief personal histories, and the interests informing my project. Although I stated outright the fact that I was conducting research conforming to a certain protocol for academic purposes, I strove to present my role foremost as simply an interested person hearing another’s stories, to erode any perceived barrier formed by more sterile identities such as researcher and subject. I expressed to them what also happens to be a vital truth for ethnography: that they had been part of a certain set of experiences uniquely filtered through their particular personalities and points of view, but also embedded in a local collective experience. There could be hundreds of thousands of accounts of Camille, Katrina, and other hurricanes, but none precisely like what they could provide. Moreover, they were experiences that I, as well as most potential readers, had not shared, in unfamiliar places. I also presented my work as having the intent of using the understanding gained to help them and others in similar situations in the future by identifying attitudes and practices worthy of reinforcement to diminish or prevent loss of life and property during a hurricane, and to enable recovery.

Ethical considerations were fairly routine but were treated seriously. Each participant was fully informed as to the nature and purpose of the research: that it was strictly academic, unfunded by any entity other than myself, and with the sole intent of adding to the understanding of how residents of a hurricane zone interpret and respond to such storms. Each participant’s identity and privacy was protected using pseudonyms or other anonymous language. In conversation with each participant, I referred to others I had already interviewed only as “other participants”. Meanwhile, although one participant was directly referred to me by another, I myself did not confirm to either that the other had participated. Besides anonymity being a typical obligatory consideration for social science research, one intended theme of the interviews has been participants’ perception of local, state, and federal government responses to hurricanes. This could involve some controversial and sensitive subjects and opinions, and participants would have to be assured they would not suffer social or even legal reprisal as a result. The possibility of emotional distress as a result of relating their experiences was one anticipated
in the planning stages of this research. With that in mind, and understanding that in Catholic congregations the pastor is often the first line of response for emotional difficulties, I reached out again to Father Marascalco. He agreed that providing a level of counseling is a common and accepted role for a Catholic priest, and that it would be appropriate to refer to him any participants who expressed the need to discuss their emotional response. The ethnographic interviews were conducted over six visits to Waveland from August 2016 to March 2017.

In addition to conducting ethnographic interviews, I visited a number of locations in Waveland, neighboring Bay St. Louis, New Orleans, and Biloxi, Mississippi that conveyed those communities’ shared experience, memory, and feelings of enduring Gulf Coast hurricanes. An invaluable resource was the aforementioned Ground Zero Hurricane Museum in Waveland, housed in the only public building to have survived Hurricane Katrina. New Orleans also hosts a sizeable museum exhibit dedicated to Katrina, rich with artifacts and highly detailed displays describing how and why the hurricane affected that city as it did. I also visited memorials to Camille and Katrina in Biloxi, Mississippi, 44 miles east of Waveland, and in two locations in New Orleans, including the Lower Ninth Ward, famously one of the neighborhoods hardest hit by Katrina (“Lower 9+10”). I explored the Lower Ninth and other neighborhoods, by car and on foot, to see the successes of recovery and the signs of damage that still remain. These observations do not offer the rich detail of the ethnographic interviews, but they do provide the visitor with a somewhat impressionistic but vivid collective sense of how residents remember destructive storms and their victims, and how they recount lived experiences of the storms to themselves, to each other, and to outsiders. This process of remembrance, and the emotional processes associated with remembrance, is an important one in living with disasters of all kinds, but including hurricanes, as observed by Dawdy (2005:723-725) and explored in more detail later in this thesis.
Even in these locations, though they are open to the public (or, in the case of house exteriors, at least visible to the public), there were ethical considerations. Museums, cemeteries, and neighborhoods in which one is a visitor - especially to those, like the Lower Ninth Ward, which have literally been the subject of “Katrina tourism” (“Lower 9+10”) - demand modest and respectful behavior, which I made sure to exhibit in my visits.

Finally, ethical behavior was required in attending Catholic Mass at St. Clare’s. This level (if only a somewhat superficial one) of participant observation at least gave a sense of the feel of the religion and its practice to a non-adherent, and provided a sense of how the congregation is a community of people who overall know and support one another. Again, ethical considerations, even if not strictly required by the research plan approved by the IRB, demanded a certain manner of behavior: an openness to learn about the faith without skepticism and a willingness to follow the customs of the Mass as a ritual, even if I could not fully understand it the way a devotee would. This kind of comportment must be considered “best practices” for ethnography or, really, any kind of social study – the spirit of the enterprise demands it even if the letter of institutional approval might not.
4.1  Exploring the Gulf

Waveland, like neighboring Bay St. Louis to the northeast (Figure 1), started life as one of a number of small communities that began to crop up along the Mississippi coast, peripheral to the larger interest in controlling the mouth of the Mississippi River and the shipping traffic and defense interests it represented (Scharff 1999:48). The introduction of rail traffic, along with small but vibrant local industries like a vineyard and a wool mill, quickened the growth of these coastal towns, and Waveland in particular came to serve as a summer home for well-off New Orleanians. Some even lived there full-time, commuting into the city only for work or visits (Ellis 1997: 119; Scharff 1999:298). The opening of NASA’s Mississippi Test Facility (now Stennis Space Center) in the 1960s provided a further boost in
employment and tourism income (Scharff 1999:525). Presently, the population skews slightly older than the median age for Mississippi (39.6 years to the state’s 36.6), with a slightly lower median income ($30,519 to Mississippi’s $37,963). However, home values are 21% higher than in the rest of the state (city-data.com 2016).

This historical arc of Waveland, Hancock County, where Waveland and Bay St. Louis sit, and of the Mississippi Gulf Coast in general, is punctuated by hurricane accounts. In 1947, before the practice of naming storms began, a hurricane swept through Waveland and Bay St. Louis, killing 20 people and destroying “row after row of beachfront homes… No house stood intact” (Scharff 1999: 541). In 1965, Hurricane Betsy was kinder to humans, causing no fatalities but still delivering a good deal of private and public property damage (Scharff 1999:595). Hurricane Camille, however, in 1969, was a benchmark storm. It too destroyed most of the homes near the beach in Waveland, Bay St. Louis, and Pass Christian, across the bay to the east. Twelve people in Hancock County died (Scharff 1999:606-611). Camille served as the standard for Gulf Coast hurricanes for nearly four decades, until, naturally, Katrina.

As someone from Western New York, where the closest thing to a natural disaster might be the annual lake-effect blizzards, it was hard for me to believe that more than a decade after Hurricane Katrina, a community might still be rebuilding. And indeed, on my first visit to Waveland, there was nothing obvious to indicate what the town had suffered in 2005. Waveland has a similar character to small, beachside towns one might visit almost anywhere in the coastal US: small hotels, low-key strip malls lining the highway, featuring a mix of local and chain stores and restaurants, and the occasional decorative palmetto. At one point on Highway 90, a large sign for a local bar called “Category 5” incorporates a stylized version of the swirling hurricane symbol now familiar from weather report graphics (Figure 2.) I saw this as the town literally advertising its hurricane history. Still, as I turned off the highway and into the largely residential areas of Waveland proper, the town continued to tell its story, in more subtle, quiet ways.
The railroad line still runs through Waveland, though the commuter train no longer does. However, the track remains notable for its role in the geography of the town. It runs northeast/southwest along a line roughly two thirds of the distance between Highway 90 and Beach Boulevard, which skirts along the Gulf. Northwest of the line, houses tend to be compact and modestly elegant. Southeast of the line, the houses become larger and showier, especially those facing the beach. Many of these larger houses are elevated on stout columns to protect against hurricane storm surge – a design feature, I was told, largely introduced since Katrina. Scattered throughout the residential area are occasional vacant lots, marking where houses once stood. Even along Beach Boulevard, there are empty lots, most bearing sale signs. New houses were under construction there throughout the period of my field visits. The railroad track is notable for another reason: it is elevated several feet above the surrounding grade. In both the 1947 hurricane (Scharff 1999:537) and, as several interviewees would later recount to me, Hurricane Camille, this elevation allowed the track to serve as a sort of natural levee, confining storm surge damage to the area closest to the beach. As in many ways, however, Katrina was a different story.
I drove further down Beach Boulevard and turned up Vacation Lane to see what would become a key venue for my fieldwork: St. Clare Catholic Church. This building, with a clean, modern architectural style and, like the beach houses, elevated on columns, was also new, built in 2010 to replace the previous brickwork church that had been reduced to rubble by Katrina. But that building itself was built to replace one that Camille destroyed four decades previously (Martin 2005).

I knew my next destination in town would deepen the story, even before my interviews began – I was headed for Waveland’s Ground Zero Hurricane Museum. The Museum is housed in the only public building in Waveland to survive Katrina: a one-story brick structure that once served as a public school (Waveland’s Ground Zero Hurricane Museum 2016). The building sits on Coleman Avenue, essentially the “Main Street” of the town, the bustling Highway 90 a short distance away notwithstanding. The older construction stands out against the newer buildings, and large stretches of land are filled only by vegetation. Only a few businesses are present, down from the 29 that were here before Hurricane Katrina (Burnett 2015). Even a visitor new to the town, having no familiarity with its streets and buildings, can detect the difference: it is clear that something changed this place. The profundness of the change can be seen on photo aerials from 2005 (Figures 3 & 4). Shortly before Katrina, the scene is as one would expect for a small town: narrow streets lined with houses and trees. Immediately after the hurricane, the houses and many of the trees are gone, replaced by a visible spread of rubble and debris, lying where the storm surge left them as it washed in and then slowly drained back out to sea and into the surrounding ditches, canals, and wetlands.

One object next to the schoolhouse also survived: a metal sign, a historical marker, commemorating the town’s survival of Hurricane Camille, and thanking people who helped: “On August 17, 1969 our city was devastated, but those who cared came to her rescue.” The sign is not alone; nearby stands a similar one that joined it after Katrina: “We thank all who came to our aid and gave us hope and help after the devastation of this storm. May God Bless.” The full significance of these signs, as well as the contents of
Figure 3 - Area of St. Clare Catholic Church in Waveland, one month before Hurricane Katrina

Figure 4 - Same area as Figure 3, immediately after Katrina
the museum itself, are discussed in Chapter 4.5.

Although New Orleans is 56 miles to the southwest of Waveland, its influence is felt there; in some ways it sets a strong tone throughout the western portions of coastal Mississippi and even Alabama, representing shared culture running along the coast even across state lines. The fleur-de-lis, a symbol of the Big Easy, appears frequently on homes and businesses in Waveland and Bay St. Louis. Mardi Gras, associated by many in the US with New Orleans specifically, is celebrated along the coast as far east as Mobile. The Waveland Walmart was well-stocked with masks, decorations, and other paraphernalia in the run-up to the 2017 celebration, and even the local Goodwill seems to sell huge bags of used multicolored beads year-round. As noted previously, Waveland has traditionally been home for people who work in New Orleans – a sort of long-distance suburb.

Despite their common culture and hurricane experience, New Orleans has different stories to tell. It suffered not so much the direct effects of the hurricane – Katrina passed the city slightly to the east, hitting smaller communities like Waveland instead – but rather the 40-day flood caused by the breaching of many levees in different areas of the city (Committee on Homeland Security 2006: 53-57). Therefore, much of the city – at least to the visitor’s eye – appears undamaged, with newer structures as well as architecture from far back in the city’s nearly 300-year history remaining intact.

The indicators are still there, though, even more than a decade later. In late summer of 2016, driving through the 7th Ward north of the French Quarter tourist hub, I noticed a house still bearing the distinctive spray-painted “X” mark applied by search-and-rescue personnel (Figure 5). Denoting when a particular building was searched, by whom, and whether hazards or deceased persons were found inside, these marks have come to be iconic symbols of Katrina, appearing throughout media on the disaster, and in a few places around the city, as here, still existing in reality. Whether this particular mark was left by neglect, or as a purposeful reminder of what the house endured, I was not able to learn.
Further north, in the Gentilly neighborhood, I visited the site of one of the levee breaches that flooded the city, on the London Avenue Outfall Canal. There was a sign here, much like the ones outside the Waveland museum. This marker did more than simply describe events; it specifically mentioned that a US District Court “placed responsibility for this floodwall’s collapse squarely on the US Army Corps of Engineers.” This sign, then, directly addressed at least one of the human factors involved in the Hurricane Katrina disaster as it was experienced by New Orleans: the widely-recognized fact that at least some of the levees protecting New Orleans were not up to the task (Committee on Homeland Security 2006: 275-284). Tiny print at the bottom of this sign noted that it was “Sponsored by Levees.org,” an organization, I would later learn, “devoted to educating America on the facts associated with the 2005 catastrophic flooding of the New Orleans region” (levees.org 2016). Not far from the sign, on Warrington Drive, I found additional, and grander, testimony from this organization: a memorial garden,
built around the footprint of a house, marked out in tile and wooden framing, that once stood there. Some lots nearby, as on Coleman Avenue in Waveland, remained empty. Inspecting the wooden framing more closely, I noticed that this memorial had a very detailed story to tell, which I will relate later.

Moving on, I drove through the Lower Ninth Ward, famously one of the areas hardest hit by the flooding (Rivlin 2015: 117-118). Signs of recovery were obvious – I regarded freshly painted home exteriors and well-kept yards. A few of the houses displayed strikingly modern design, and, like the Waveland beach houses, were elevated on columns – these were what are sometimes called the “Brad Pitt houses,” built on the initiative of the famous actor in conjunction with Global Green USA and other charities, to offer safer (and stylish) replacements for residents who lost their homes in the flood (Rivlin 2015: 305-306, 332-334, 373-375). Not far from these houses, a simple display built on a vacated lot, similar to the one next to the London Avenue Canal, described the details of these houses and how and why they were built, along with historical and cultural information on the Lower Ninth and the reasons it was so badly affected by Katrina. But scars were evident in the neighborhood too. Some houses, perhaps abandoned, were boarded up and decaying. Some lots were so overgrown with thick vegetation it was impossible to tell if a house was still present at all. The streets were pitted with potholes so large they turned driving into almost an off-road adventure.

I made my way to Jourdan Avenue, on the west end of the Lower Ninth. There was the levee – as its partner in Gentilly standing so tall and resolute it was hard to believe that 11 years before, a torrent of water had been gushing through it to flood this modest neighborhood. But here too there was a sign to ensure that a visitor would know what happened. This one had an interesting detail, though: it mentioned that the “flood wall broke with an explosive sound, heard by many residents.” This was unmistakably a reference to a suspicion, held by some but never proven, that the floodwall was intentionally breached to divert flood waters away from wealthier parts of the city and into the generally poorer Lower Ninth (Lee 2006, “Lower 9+10”).

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The Lower Ninth also had a memorial (Figure 6), impossible to miss for anyone driving into the area on North Claiborne Avenue. It stood on a wide median (“neutral ground” in New Orleans parlance) and displayed stairs leading up to a bright red empty house frame – almost the ghost of a home. Alongside, blue columns portrayed water gradually rising up to the maximum depth the neighborhood endured. Nearby, a stone marker in a more traditional style dedicated the monument to the “victims and survivors of Hurricanes Katrina and Rita.” (Rita followed Katrina less than a month later.)

![Figure 6 - Katrina Memorial, Lower Ninth Ward, New Orleans](Photo by the author)

At the opposite end of New Orleans from the Lower Ninth, on the heavily traveled Canal Street, sat yet another Katrina memorial (Figure 7), perhaps the most striking – and haunting – of all. It was laid out in concrete and granite in the shape of the “hurricane swirl” symbol – a fact made clear to visitors at ground level by a diagram on the monolith at the center of the space which also summarized the events of Katrina in New Orleans on the opposite side. Benches invited quiet contemplation. This memorial sat
among some of the largest examples of the city’s iconic cemeteries, a fact which is highly appropriate, for reasons I will discuss later.

Exploring further downtown, I noticed advertisements in souvenir shops for “Katrina tours” of notable sites related to the hurricane, still operating after more than a decade. Also in the heart of the tourist district, though, housed in the historic Presbytere building, was the New Orleans partner to Waveland’s museum. I visited this museum towards the end of my fieldwork period, and will describe its offerings in Chapter 4.5.

Physical reminders of local hurricanes, whether those created by the storms themselves or the humans who experienced them, were still common throughout my field sites. All of these had stories to
tell, but to help interpret them, as well as to investigate the human dimension more deeply, I turn to my ethnographic interviews.

4.2 Hurricanes in Action

It’s certain that no one who has not survived a hurricane can truly understand what it is like to endure one. However, through narrative accounts we can begin to get a certain insight into the experience and how it impacts both self and place. Although my tours of Waveland and New Orleans provided a good deal of material related to sense of place, the ethnographic interviews illuminate the people’s lived experiences of environmental disasters that the built environments symbolize. I recruited nine members of the St. Clare congregation for my project. Of them, eight had been present for both Hurricanes Camille and Katrina; four were also present for the 1947 hurricane. I was also able to draw on a wealth of written and recorded accounts to augment this sample set.

To begin, the sensory experiences of hurricanes are notable. More than just a difference in degree from an ordinary thunderstorm, many accounts portray the hurricane as nearly an unearthly phenomenon. Smith’s history of Hurricane Camille gives special attention to these sensory experiences, with a couple of his interviewees reporting on the almost alien presentation of that storm and its effect on them. For Lee Roy Clark Jr., Camille made “the weirdest sound I have ever heard in my life… an odd, whine-like sound. I mean, I don’t ever want to hear that sound again” (Smith 2011:13). His strongest memory, though, was of “The force… The force and the blackness… The blackness, and just the tremendous force of it” (Smith 2011:19). Kenny, one of my oldest interviewees, with experience of every area hurricane since 1947, described Camille’s wind as “A godawful howl… I’d never heard a wind… anywhere near that, wind that sound. That was scary.” Another interviewee, a former salesman I will call Don, related how the calm of the eye of Camille passing over revealed shocking new sounds: “You could hear people hollering and screaming, and cats and dogs… ‘cause it was dead still. People hollering
for help.” Then, as the eye moved on and the other half of the storm hit, Camille deceived Don’s hearing: “I thought it was jet planes flying over... but it was tornadoes.” This feature of Camille played a similar trick on Nora, another of my interviewees who, as the storm roared through, said to her husband, "I can't believe they're allowing trains to go over the train bridge during the middle of the storm!’ and he said, ‘That's not trains you hear - those are tornadoes!’ Well you could have gone all night without telling me that, you know?” Almost four decades later, Phyllis Montana-Leblanc, one of the major figures of “When the Levees Broke,” would recount in a memoir similar perceptions of nature askew during Hurricane Katrina:

The sky looks weird. The clouds are dark gray, light gray, white, and almost black. And they aren’t all together at this point in time. They’re all separated, as if they know that once they connect all hell will break loose... There is the most horrible feeling of fear, and at the same times I feel a strange beauty in it. What comes to my mind are two words: ominous and ethereal (2008:10)

Meanwhile, the strength of hurricanes can be shocking. Almost like a deity, they exert awesome force with no regard for mere human will or fortitude. Kenny further described the power of Camille: “It had the highest winds of any storm till that time to ever hit the continental United States – over 200 mile-an-hour winds. And I opened the door at one point, just to see what winds like that felt like, and it blew me flat, back in the room.” Oliver, my youngest interviewee, reported his surprise in seeing how Katrina’s winds defied a more constant natural force, gravity: “I saw an old model Lincoln Town Car kind of, like, levitate in the air and then drop! I was like, ‘Whoa! It's getting kind of scary!’”

These accounts are not only casual reportage. They in fact represent the leading edge of the deviation from, and destruction of, the state of normality as defined by everyday human experience. The normally mild climate of the Gulf Coast is upended, even beyond the remarkable but still conventional occurrence of a severe thunderstorm – a hurricane is a dramatic difference in character.
The process becomes more pertinent to issues discussed in this project once the effects of the hurricane are perceived: the storm has begun to violently rearrange the humanmade physical environment. Not only is the weather itself strange, but now the landscape of the community is presenting surreal images that challenge everyday reason. Natural features are intruding into cultural ones, and cultural ones are in disarray. Helen, a longtime Waveland resident, reported to me that the seriousness of Katrina only sank in when she looked out the window of her house and saw one of the family cars floating in the rising floodwaters. Paul, an emergency doctor and volunteer fireman in Waveland, related seeing a man floating by on the water, riding on the unmoored roof of his house. Nora commented on how after Camille, she was struck by “the number of snakes that were hanging over the seawall - dead snakes that had drowned when the... surge hit the river, the Jordan River, and washed them all back into the... salt brackish water they drowned. And it was just it was a sight to behold, to see all those snakes.” Kenny extended his personal physical encounter with Camille’s winds to their effect on structures in the community: “It was roofs being blown off, it was houses being blown down... windows being blown out... it wiped out our bridge on Highway 90.” He observed similar effects during Katrina, that time from the force of water rather than wind: “There’s one subdivision from here... about 175 or 180 fishing camps, nice houses... One house remained after the storm. So that surge of water just came, and hit it direct on, and then once it knocked the first houses down, it’s a domino effect. Just went right on through the whole subdivision.” Martha, another of my oldest interviewees, with vivid memories of storms stretching back to the 1947 hurricane, remarked on how Camille left stuffed animals and other toys hanging from trees like bizarre holiday decorations. Oliver had experienced Hurricane Elena in 1985 as a boy, making Katrina his second major hurricane. He was in Gulfport, Mississippi for Katrina, and remarked how the blasted cityscape with streets emptied of people was like “a ghost town... a Stephen King horror movie. Like ‘The Walking Dead’ without the zombies!”
For some, seeing neighborhoods rendered unrecognizable, familiar landmarks erased, caused an intense emotional response, often invoking powerful past memories, as Don related to me in one exchange:

Don: It was a couple days later... we went to the beach after Katrina. "You wanna go look?" I said, "I guess I will." But I just... hit the beach and burst into tears. It just... it was like somebody hit me in the chest with a hammer. I had repressed all these negative experiences I had with Camille, you know... and it just opened up all those old wounds, and... it's hard on you to watch everything - you know, you drive down the beach, and there were no landmarks anymore, you know... you knew what this house was, or that house... and it's all gone.

RL: People keep telling me that - that they hadn't recognized streets that had been familiar to them.

Don: Oh yeah - where somebody lived! "Well I think she lived here... but I'm not sure." Because all the lots were just cleared!

Martha related a similar story about the Catholic school that had been lost in the destruction of St. Clare:

We would start riding around, my husband and I, and we had one of our sons who attended school there was with us, and we rode to what was the back part of the place, the play area of St Clare - the church of course was gone, and we used to have - the children would have a field day every once year and... that's the first time I saw my husband cry. I guess, you know, it was the flood of memories, of our children, of going to St Clare. And I guess, you know, he was so busy when we were in the house doing everything, and you know - getting rid, throwing everything out and gutting walls. I think when he got here and he realized, you know, all those memories were just washed away. Now I mean the memories still stay, but it was- I guess it was the shock - then is when it really hit him.
The removal of familiar features of the built environment, then – the things that for residents of these communities transformed “space” into “place” – not only impacted the physical structure of the communities, but also the psyches of residents, often in powerful ways.

4.3 Response

Residents are by no means only passive victims of hurricanes. Every resident with whom I spoke shared stories of action taken to mitigate damage and avoid loss of life before and during the storms – others’ lives as well as their own. Many of these actions were driven by lessons learned from past hurricanes – not only immediate perception and reasoning but also past experience come into play to inform agency.

Besides general preparation for hurricane season, response may begin at the first indication of an approaching hurricane. With the benefit of modern weather technology and constant media coverage, this can be at least a few days. This being the case, though, many will ask the question: why did more people not evacuate before Hurricane Katrina?

The reasons naturally vary. A common and important one is that the danger of the storm was severely underestimated, perhaps especially by those who had dealt with hurricanes before. Pardee’s work with women in New Orleans found similar accounts. Twila: “I stayed because I done been through a hurricane, and it was a bad hurricane. Because I’d been through them before, so I didn’t think nothing of it (Pardee 2014:43).” Sarah: “With Hurricane Ivan, more people left than this time; New Orleans barely had a sprinkle, so a lot of people feel it’s wasted money and are not gonna want to leave. Nobody took Katrina as serious as it was!” (Pardee 2014:45)

This tendency has serious implications for future hurricanes in any Gulf Coast community, as it portrays in practice what Trumbo and his team found in their experiment. Residents had used past hurricanes as a template, but had underestimated the risk of the latest, overlooking the fact that each
storm is unique and may have different effects. Even though Katrina had weakened to a strong Category 3 by the time it made landfall – much less than Camille’s Category 5 in 1969. Nevertheless, Katrina served up record storm surges compared to the earlier hurricane (Masters 2017). Meanwhile, Hurricane Ivan, referenced by Sarah as causing “barely... a sprinkle” in New Orleans, caused significant damage in places further to the east and southeast which it struck directly (S. Stewart 2011:4-6).

One of my interviewees was Rick, a US government meteorologist who lives in Bay St. Louis and attends St. Clare. Rick played a key role in the production and release of the dramatic warning (see Appendix) issued by the National Weather Service which announced the coming of Hurricane Katrina and predicted widespread devastation and “human suffering incredible by modern standards” (Brinkley 2006:79-81). Rick explained how that announcement was calculated, at least in part, to combat complacency with hurricane warnings:

Hurricane George, which hit Mississippi here as a weak Category 2... it was weakening as it made landfall, so it didn't do a great impact. That was in 1998. But at that point it was the largest evacuation effort ever. It had like a million people who evacuated the area, and ended up being like a false alarm kind of event because it didn't turn out to be much... So we had a jaded public now all of a sudden that was reluctant to leave just because we were told - because the government was saying, you know, "Evacuate." So Katrina took this certain situation where it was a Category 5 the day before... this was the big mother of all storms it was going to hit, and so I put the warnings out on that Saturday before landfall, and then Sunday morning was the big one, and that's the one that... got national attention, and they said, "Hey, is this for real? This is heavy wording in here. I mean, this is saying, you know, 'areas going to be devastated for months,'" and it panned out. It worked out, and the reason being is it took that kind of a heavy language to get people to evacuate, because they were so reluctant because of their experiences with George.

Although none of my interviewees expressed being forced to stay by limited financial means, it was another major factor for many residents, as the written accounts show. Sarah noted above that for one
to evacuate only to have the potential effects of the storm be overestimated would be “wasted money”.

However, for some people of extremely limited financial means, even to waste money was never an option. As Ebony recounts, despite wanting to leave, she had no choice but to stay at home in New Orleans: “I couldn’t afford to go. If I had money, I would have been gone. I didn’t have no transportation. My son didn’t have enough money to not go to work. He had a car, but no gas. It’s like you ain’t got nothing” (Pardee 2014:44). The factor of economic class in the inequality of impacts from Hurricane Katrina in New Orleans has been well-documented (Brinkley 2006:66-70; Colten 2006:732-734; Rivlin 2015:118-119). Although it did not present itself outright among my interviewees in Waveland, my discussion with Rick indicated that it was certainly an issue in that area and would continue to be in future major hurricane situations:

To get people to understand that, and to say “You have to save up X amount of money in the event, keep that on hand, and”... around here we’re dealing with a very low income-type population around here, and it’s hard to convince them to keep 300, 400, 500 dollars on hand during hurricane season in the event - in cash - in the event that you need to leave in the middle of night to go stay somewhere else for for a few days until you can come back.

Discussion of the income disparities that kept so many in harm’s way would prove rather ironic after Hurricane Katrina. One side effect of the near-leveling of Waveland in that storm was a relative leveling of class distinctions in the conditions of privation afterwards. With the normal methods of supply and distribution wiped away, residents found a strange but often appealing new kind of equality, as Martha reported:

I remember when... different churches would set up tents, and they would... fix meals. You could go for breakfast, lunch and dinner. And we were saying we stood in line with the very wealthy and with the very poor. There was no distinction at that time. And I remember thinking "Boy wouldn't that be a wonderful world, if it if it stayed like that!"
There really wasn't any distinction - we had all been through the same thing, and you know... didn't matter. all the money in the world didn't mean anything - you had no way to spend it!

This was only one aspect of the way Katrina rearranged not only the physical and cognitive environments, but also, temporarily, many social norms. Rick described his own feelings at seeing the former everyday state of affairs replaced with widespread new expressions of generosity, such as when his weather station came to act as a fuel distribution point:

So I go out, and I'm helping with that operation. And I'm sitting there smiling and everything, and they say, "There's all this going on, and you're just happy." I said "Yeah - you don't see the wonderful thing going on here?" I mean, I had like a... spiritual revelation for me to see as a community we were all coming together, doing these things that two days prior to that, that we had no idea we were going to be doing. I said "Look what we're doing here... we're helping critical people here! This is not part of our routine job."

This dynamic was not entirely positive, though, as Jerry, who had been a police officer in Waveland at the time of Katrina, related to me: “... the Walmart... second day there I can remember people coming outta there with TVs, stereos.” The floodwaters had swamped the police station, cars, and officers, so Jerry was unable to do much to address the looting. “Eight wet bullets, no patrol car, no way to lock ‘em up or approach them.” Store management entreated him not to anyway, in another reversal of social order. “The lady at Walmart came over to me... she said ‘Let people go in there and take whatever they want... just watch the guns, the jewelry, let ‘em get the food and all that,’ but... it was like ants – people going in there and coming out with fifteen Shaquille O’Neal jerseys, you know. Just stupidity.”
Aid and support shared between residents and visiting volunteers and aid agencies was, then, commonplace but there were also instances of bad behavior. This wasn’t confined to opportunism of the type that Jerry described. Oliver witnessed preferential treatment given by aid agencies:

I really saw how, you know, people with money started getting more attention... So I saw it - I saw that imbalance. I saw how the upper middle class communities were getting more, better - you know, FEMA, they were there with mobile sleeping units. We didn't even barely have food and water. You know, it's like to heck with everybody else, and just, let's take care of the certain groups of people who they deem as "somebody."

However, the unequal treatment that Oliver observed was limited to the behavior of the government agencies. The faith-based and other volunteer groups, he said, “treated everybody like everybody.”

Kenny observed that the post-storm chaos “... brings out the best and worst in people.” For him, though, shining examples of “the best” were apparent in the response of religious organizations. They gave him a new perspective on the diversity of religious faith:

I was raised Catholic... and at one time you think that that's the only - the main religion. Well, everything I ever knew about religion changed when I saw the way people of every faith volunteered themselves, spent money to get food and clothing for people - people that didn't have a lot of money... people that they were, you know, they were just doing it out of love of their fellow man... it changed my whole attitude about religion, you know - all religions are good. Now, some people may abuse them, you know, but no matter what your religion is what your feeling is, if you believe - you’re a good person. And those people came out of the woodwork to help us.

As I have noted, my observation of the religious responses to Katrina was a major inspiration for this project. They appear again and again in the written and recorded accounts in a variety of
forms, such as when Phyllis Montana-Leblanc recounts her reaction to the growing fury of the storm in “When the Levees Broke”:

I started praying... a lot... and I’m praying, I’m praying, I’m praying. I’m getting my husband prayed up, I’m getting me prayed up... I’m like... you know what I never thought about? God’s will. What if this is actually God’s will for us to die, right now – for this to be the time? For us to die like this (Lee 2006)?

Her leap there – from prayer to wondering if God was meaning for her and her husband to die at that time – proved to be a recurring theme in some responses to the hurricane – even some high-profile ones, such as the statement, referenced earlier, of New Orleans Mayor Ray Nagin on Martin Luther King Jr. Day, 2006: “Surely God is mad at America... He sent us hurricane after hurricane, and it has destroyed and put stress on this country” (Brinkley 2006:618). Some observers cast the event in even darker and more specific shades, such as suggesting Katrina was direct divine retribution for national misdeeds such as legalized abortion, military action in the Middle East, or tolerance of homosexuality (Cooperman 2005). The infamous fundamentalist Jack Chick devoted one of his comic strip tracts to the subject (Chick 2008).

However, the people I interviewed were not inclined to that interpretation. Paul, in fact, countered the idea directly in our conversation, without me even raising the subject:

It amazed me later to hear that some of the evangelists said that, you know, God sent things to New Orleans because of their Sodom and Gomorrah attitude. As far as I’m concerned, that is not why he sent them. In other words, you know, I don't consider that, you know... my God is a God of love. He is a simple God. In other words, he's not complex.

Oliver had a similar take on hurricanes in the area in general, and Katrina in particular, though he did not shy away from ascribing some kind of divine intent that might be outside normal human understanding:
I think it's just, you know, the weather. I don't think it's, like, God's punishment... because New Orleans is like the city of Babylon, like some of these really holy rollers kinda want to use it as a ‘cleansing.’ I mean maybe there was something... there was obviously some kind of purpose for it, you know, but I don't think it's like God's wrath - I don't do with all that.

Rick – perhaps unsurprisingly for a meteorologist who well knows the scientific explanations for hurricanes, expressed a similar view, though he stressed the role of God informing the human response to Katrina:

I don't think there was something like direct divine intervention or saying He wanted it to go to Louisiana or Mississippi to wreak havoc there... so I'm accepting of the fact that it was just a natural process that was playing out, but through that... there was a lot of human aspect stories, anecdotal stories and everything - mine and a bunch of others - to see communities come together, and help from afar come in, and... I mean I think that's where the divine intervention is. It's not so much the causative as much as the response to it, and how people respond and react to it...

Rick found that the expectation of Katrina, as well as the response to it, strengthened his faith, which he had previously been questioning:

I never felt... as mortal as I did the days before Katrina. That's where my spiritual side kicked in, 'cause I was struggling a little bit with my religion at the time, and I did something I never done before. Going to work, I actually brought my rosary to work! I left my house, sent my family off to evacuate the area, and that's - because I had to work at the office... I was going to be on station for the rest of the duration of the storm. That's the only possession I took with me. And, uh... So yeah - it moved me spiritually enough to do something I never done before. That was out of character for me to do that, and I prayed my rosary that night.
Martha also reported a marked level of spiritual development:

My faith has gotten so much greater. You know... something like this, your priorities totally change. My faith has become much stronger after going through Katrina. It's... it's difficult to put in words, but I think... there's a spiritual guidance after that you... you become more in one with your surroundings, with your... everyday people you meet on the street. You become more compassionate. I mean, it's unbelievable how spiritually I have grown. I guess before I didn't... maybe, I don't know, maybe raising children I didn't have time to think about what a gift having a spiritual life is, but now I just can't imagine not having the Lord on my side, you know.

Many responses were, of course, directly pragmatic in the earthly sense: moving to higher floors of buildings as floodwaters rose, helping friends and neighbors to safety. Such responses often display the value of quick and creative action, as well as monitoring the progression of a storm, as Kenny recounted from his Hurricane Camille experience:

I know enough about storms to know once the eye passes through it reverses. So we were, we were on the other side of where the wind was going to be coming from, as opposed to the start of the storm when it came right at us, and blew out some of our windows and so forth. We put up a barrier... we took that box spring and mattress off one of the beds, and we had a rather large guy - a friend of ours... I'll never forget this - about a four hundred pounder, and we put that thing against the windows just before it broke, 'cause I was sitting near it, and I could feel it, you know, trembling from the - from the wind, and I knew it wasn't going to be long before it blew out, and if it blew that into the room, 'course twenty-two people, you can have cuts, and you know - people really get hurt. So we put that thing up there, and I sat Sam in a chair, right next to the thing to hold it up against the window, the box spring, 'cause I knew that that wind wasn't gonna move him or anybody else his size!

Kenny, for one, insists that typically in the midst of hurricane response he “Didn’t have time to pray!” Still, even in such accounts, faith often flavors the narrative – with a quick prayer for
strength or safety coming in a pause in the activity – or kicks in after the fact. It particularly remains a major theme in the recovery process, as the next section shows.

4.4 Recovery

Almost immediately after a hurricane ebbs, the process of rebuilding begins – not only rebuilding the physical spaces, but also rebuilding the community. Paul maintained in our interview that prompt effort was necessary for successful recovery: “You have to get started picking up things in the very beginning” – not only to achieve a physical momentum in the process, but to fight off despair. After Katrina, he noted, “Depression abounded” and “Suicide was very common.” Oliver conveyed that he felt Hurricane Katrina threw his life into major disarray – plans for work and school that were just coming into fruition ended up being put on hold for years after the storm wrought havoc on the Mississippi coast. He is, by his own account, in a fairly good place now, just about to finish a Master’s degree in Information Science. Nevertheless, he does sometimes feel the weight of the time and chances lost. “I’m still trying to put the pieces together. It definitely put a stop on me, for my life. I mean I was intending on working as a life insurance agent and going back to college at night… The journey is still going on from 2005 to 2017 for me - I'm still trying to get my life together.” Therefore, the process is emotional, cognitive, and social as well as material. Not only does actively participating in the recovery give people a sense of control over events, but seeing human order return to a place aggressively disordered by disaster, especially one’s own home, may prove therapeutic.

“I had three epiphanies,” Kathy Pinn, the director of Waveland’s Ground Zero Museum, told a patron during one of my visits. She was referring to the long period of recovery after Katrina. “I saw a new leaf on a tree; I saw birds flying over the Gulf, and I saw a new washer and drier in the back of a pickup truck.” For her, then, recovery was very strongly signaled by the return of the natural order as well as the human order – not only were the new leaf and birds signs of life returning, but the appliances
indicated people rebuilding – not only rebuilding physical structures and the provision of modern accommodations within them, but also rebuilding their lives. The disordered space was beginning to become place again, through the reintroduction of familiar natural features inherent to the region, but also through indications that the “lived bodies” of Casey (1996:24) were still present and active in making place, and in turning it into home.

Through the long, slow, and often arduous process of life in the Waveland area returning to normal, people found renewed appreciation of the smallest, most mundane things. Given the scarcity of fresh, clean water, Paul reported that “The nicest thing that I can remember was being able to brush my teeth, you know, after probably a week... it just felt so refreshing.” Nora echoed this sentiment, and extended it into her life 11 years later:

> I remember one morning I was brushing my teeth after our water was turned back on, and I said, "Dear Lord, I'll never waste another drop of water." 'Cause you know sometimes you're cooking or something, you might leave that faucet running, you know? I always pop it off now because it is, it really is, something to think about when you don't have it. But I guess my experience through hurricanes, if they have taught me anything throughout my life... they have taught me to appreciate just the basics in life that I have, and... not take them for granted.

Special events took on greater significance too, even – or especially - if some of the trappings may have been absent, as Martha describes:

> I remember the first Christmas, when we were in the trailers. The whole house was just totally gutted... so we lit the fire place and we hung a light - a big floodlight with a metal - I don't know what you call it - like a workshop light. And we all had sleeping bags and blankets and we had our regular Christmas get-together in there - you know, exchanging gifts and that morning seeing what Santa brought... And I remember granddaughter said, "You know, grandmother, that was one of the best Christmases I've ever had." And it was - we had an old portable radio with Christmas music playing, and I guess it was different, so they were - it was something they'll never forget I guess... and I think after
going through all of that, it meant so much more - to be there and still exchanging gifts, and the holidays still came, and we celebrated, you know. It... I guess things go on, you know, and I think that was an awakening thing for them.

Christmas, of course, has ritualistic aspects, as does Mardi Gras, the pre-Lent celebration iconic of New Orleans as well as other parts of the Gulf Coast. The first New Orleans Mardi Gras after Katrina was key to the economic as well as the spiritual revival of the city (Rivlin 2015:234-235, 258). The same held true in Bay St. Louis, even if, like Martha’s Christmas memory, some of the glitz was gone. Floats were hastily repainted, and the usual festive costumes were unavailable, but the joy and power of the holiday remained, perhaps felt even more strongly than usual (Koch 2010:221-222). Kenny and his wife have both been active in the Mardi Gras celebrations there for five decades, and told me they made the effort “because we thought it was important to bring people together” to send the message to visitors as well as each other that "we're alive and well and we're coming back."

Great value was also found in the most sacred religious rituals, even after many of the buildings that hosted them had been destroyed. This too gave survivors something reliable to cling to – a tradition they could see stretching on into the future, just as their lives and communities would, as Rick related:

I saw the role of the Catholic Church as admirable - quite admirable... that they felt the importance of - no matter what happens - you're going to have Mass this Sunday. A lot of 'em... church was destroyed and everything, I saw that with a lot of communities ... but I found out that in the parking lots of a destroyed building, they all still held their Mass... the most important thing in the Catholic life is you’re gonna, you know, adhere to the faith and no matter what, you're going to come through this. And so I think with that the strength of the Catholic community is vibrant in the recovery effort. And uh... putting everything back into perspective, you can lose everything in your life, but you still got the Catholic Church to come home to. We're still going to do Mass, and we're
still gonna carry on business and get everything back on track... and so yeah - it's quite admirable to see that.

However, mental and emotional coping only do so much and go so far. Even in a small community like Waveland, the level of damage from a major hurricane requires a great deal of material recovery. This can be a long time in coming – early in my fieldwork period, Waveland was just getting a new building for their police department, to replace the one destroyed by Katrina 11 years before.

In some cases, the material recovery may be hampered by the very legal and economic mechanisms supposedly meant to help people deal with the risk of living in a hurricane zone. A major culprit, as identified by many of my interviewees, was insurance. The insurance industry failed many residents of Waveland and Bay St. Louis after Hurricane Katrina, as the majority of damage to homes was dealt by storm surge and subsequent flooding – not by wind, which was all that many policies covered. Shortly after the storm, unsurprisingly, flood insurance rates skyrocketed. Where insurance costs are not raising the price of living in the Waveland area, they are driving people out of town, retarding the recovery, as Nora explained: “Insurance is what's really crippling this area right now. That's why we cannot get Coleman Avenue redeveloped. A lot of people in the county have just moved north in the county too, because insurance rates are so high.” Don also laid blame on increasingly stringent regulations imposed by the Federal Emergency Management Agency (FEMA), indicating that they not only made new construction more difficult to execute, but, in the case of the new beach houses I observed, might actually increase risk from future storms:

Some of their construction requirements, like hurricane clips and different things that you have to do to secure you your floor to your ceiling to your roof, those things are good, but when they tell you your elevation has to be 25 feet, and they put these
houses up on those stilts... I guarantee you they're going to blow over. They're going to blow down, they're not going to flood, but the sustain of Hurricane Camille-type wind field... they just gonna come crashing down. And they won't even let you put X-braces from the top to the bottom!

Rick is more sanguine about the elevated houses, saying they are “built to resiliency” – to withstand the force of storm surge regardless of the columns they sit on - but acknowledges that other parts of the area may suffer greater challenges in rebuilding due to the relatively low incomes of certain parts of the population. He recognizes, though, that developments in local infrastructure and government stand to ease the impact of a future major storm:

All in all the infrastructure came back stronger. The fact that they built the Bay Bridge higher and much better... that was a huge factor. When they lost the bridge, that disrupted flow of commerce, and just general conveniences of the area was really hampered. But the new bridge... as a community, as a county, and everything... collectively all three of the counties kind of work together when it comes to that regard. They built their infrastructure a whole lot better, the communities... if [another major storm] happens within the next fifty years I think the next generation will be better suited for it.

Rick and his family, though, developed their own pragmatic and proactive means of limiting at least the financial impact to them of life in a hurricane zone, once they moved to Bay St. Louis from the New Orleans area. “We don't buy - we rent, because I don't like the idea that you have to pay $6000 in homeowner’s insurance for flood protection 'cause you're in a hurricane prone area. I get it, but I don't like to spend that. So I pay my $600 a year renter's insurance so it's a lot cheaper.” They are using their past hurricane experience to aid in planning for future storms, easing their financial commitment and recovery in advance. “I would never buy that house for that very reason - because it's had eight feet of water before and it will probably have eight feet of water again.”
“Recovery” is not a one-dimensional process, not only the rebuilding of the physical space. Rather, it is a complex interplay of factors personal and interpersonal, physical and intangible, emotional and spiritual as well as practical. Powerful actors, like governments and insurance companies, may become involved in ways which can be perceived as enabling or hampering the recovery. However, residents exercise their own judgment and agency to navigate the hurdles and entanglements and find their own way back to a sense of normalcy – there are as many processes of recovery from a hurricane as there are people affected by it. This process is aided by ties within and between communities, especially those formed via religious affiliation, and by engagement with familiar and meaningful rituals, particularly ones which are tied to the local culture or that same religion which brings people together and provides them with strength, hope, and a sense of fellowship.

4.5 Remembrance

“Some people don’t wanna talk about it,” said Helen, during our interview, of her Hurricane Katrina experiences, “but I don’t mind talking about it.” Survivors like Helen may be doing an extremely valuable service in sharing their hurricane stories – valuable not only to people trying to learn from them, but also to themselves. As Hoffman has argued, remembrance can be an aid to recovery. This does not mean the process is easy, however. Although all my interviewees appeared to talk freely and easily with me, some of them did express challenges in fully putting the impact of Hurricane Katrina, in particular, behind them. Martha’s thoughts, for instance, lay with the next generation:

Still today, you know, it’s difficult to see your children go through that, and your grandchildren. We had little ones that were coming to St. Clare when the storm hit, and it was difficult to explain to young children what was going on - why they couldn't come back home, why they couldn't go to school... and I think that was more painful than
Losing everything: it was seeing my children and my grandchildren lose, you know. And like I say, I'm still... it still fills me up. It's... it's something you never want to see your children have to go through. I mean they're OK, and they're fine from it, but it was rough.

Rick, too, has been heavily affected by the impact of Katrina on others. However, he channels responsibility through his role as a government official charged with warning the public:

On my score card for my career of 27 years, I got 1190 deaths on my scorecard. Most people in the entire weather service. And I gotta live with that every day. That's the personal and professional part of me that I gotta live with. That's nothing I'm proud of. I mean, you got a bunch of folks that I work with that have zero deaths for their whole career, or with... one or two maybe, in their career. I lead the bunch with 1190 and , uh... 1188 was that day, on August 29th. So it's... that's a tough thing to accept.

Still, he says that knowing that the warning did compel some people to evacuate who otherwise might not have is a great relief:

They actually brought in the body bags... they requested of the state to bring body bags to the morgues on the order of like, twenty five thousand of 'em - they were expecting that many deaths. And they said because of the warnings, and people were finally evacuating like they were supposed to, the death toll was... I don't know if it's ever manageable or if it was acceptable, but - it was still high, but it could have been a lot higher. Magnitudes higher.

Written accounts, too, convey how strongly a hurricane experience can resonate, even years later. In her memoir of Hurricane Katrina, Phyllis Montana-Leblanc reported, “I still have nightmares about drowning and starving to death while dogs attack me, eating at my body (2008:171).” Meanwhile, a Camille survivor related how even a particular sound associated with the cleanup could bring the past abruptly into the present:
And if you ever wanted to find out who had been in Camille, or who knows anything about Camille, buy you a chain saw and start it up, and watch the expressions on their face, and you can tell who’s been in Camille. That’s one noise people will never forget. It would start at five in the morning, and then they’d go to about seven at night... I can be anywhere now, and a chain saw will start up, and I’ll stop. It’s just that you heard it for months, and months, and months, nothing but chain saw. (Smith 2011:14)

The impact of disaster, then, can create a vein of feeling running through a person’s psyche: the sensory experiences of the past rising to the surface to undercut those of the present, and transport a person, at least in small part, back in time. For this respondent, it could be said that Camille did not just rearrange the immediate physical world, but their very personhood.

Besides narratives like these, the transmission of individual and collective memories to long-lasting physical form is a strong aid of remembrance. This process is readily apparent in the museum exhibits and memorials of Gulf Coast communities which have survived hurricanes.

As an uncommon survivor of Katrina, the Ground Zero Museum building in Waveland (Figure 8) serves as a physical reminder and symbol of resilience. However, this sentiment is powerfully driven home upon entering the building as seeing the prominent blue mark running the length of the interior, marked “WATERLINE” – this is the height the floodwaters reached inside the old schoolhouse (Figure 9.) The line serves as a memory aid for those who experienced the storm in Waveland, and an imaginative spark to those who did not – a visitor is compelled to picture the flooded building. Moving through the space, photos and printed narratives describe the progression of the hurricane and its effects. Higher up on the wall are quilts – made, one learns, from scraps of fabric recovered from the storm debris. More than artifacts, the quilts serve as creative symbols of order being restored to chaos, of that which was destroyed being created anew, but with the old still present and recognizable. In a separate room, artifacts recovered after Katrina (as well as a few from Hurricane Camille) are displayed as those storms
Figure 8 - Hurricane Museum sign, Waveland (Photo by the author)

Figure 9 - Museum waterline, with recycled fabric quilts visible, Waveland (Photo by the author)
left them. Another room is devoted to local artists’ interpretations of the disaster. Besides all this, during a visit in late August 2016, I was lucky enough to attend a small memorial ceremony, open to the general public, marking the 11th anniversary of Katrina. Residents, public officials, and media filled a small auditorium in the building. Attendees recited short speeches, prayed, read the names of the city’s deceased, and laid a wreath laid at a stone monument outside. In her speech, Kathy Pinn memorialized not only the dead, but the volunteers who gave so much to support the town’s renewal: “We are in sadness for the people we lost, but thank God for the people who stayed to help.” The Hurricane Katrina exhibit in New Orleans’ Louisiana State Museum, meanwhile, tells both a larger and a more complex story. As in the Waveland museum, extensive narrative and photographic displays, as well as artifacts related to the hurricane, and the addition of video displays, tell the story of the progress of the storm itself and its effects on New Orleans. The actions of residents and emergency responders are portrayed. Interactive exhibits show the mechanics of storm surge, and of how wetlands like those that make up large portions of southern Louisiana can operate to weaken hurricane strength and absorb floodwaters. The failure of the levees, and the technical reasons for the failures, is described, as is the awareness of the populace of the inadequacy of those structures, before as well as after the storm. One artifact, a preserved t-shirt reading “MAKE LEVEES NOT WAR” ties that failure, and by extension public infrastructure spending in general, to the War on Terror that was still freshly raging in 2005. This museum, then, portrays Katrina as far more than “just” a “natural” disaster. It was fundamentally a social one, not only through the planning and engineering decisions that positioned the city to suffer, but also in the ways people responded in emergency and in recovery.

I also made time during one field trip to head east from Waveland to Biloxi, where memorials to Hurricanes Camille and Katrina sit in close proximity to each other. At the Camille Memorial, a mosaic in the image of a hurricane as seen from space lines the bottom of a reflecting pool – again, the hurricane imagery is incorporated as a permanent feature of the public space. Biloxi’s Katrina Memorial,
meanwhile, includes a transparent case containing an assemblage of artifacts recovered from the post-storm debris: a clock, a child’s costume fairy wings, a trophy, angel statues, an ornate crucifix. As in Dawdy’s discussion of the taphonomic process of rebuilding New Orleans, here are the physical representations of residential memory, preserved to represent attachment to a single defining event. The names of Mississippians killed or rendered missing by the storm are inscribed on these memorials too – in death, given a long-lasting public recognition through the events that took them from their communities.

Two of the New Orleans memorials may tell the richest stories. I previously mentioned the signage at the London Avenue Canal memorial garden. Those signs provide a series of narratives and diagrams that describe, in great detail, the series of planning and policy decisions, geographic alterations and geophysical forces, and the engineering failures, that led to the levee breaches in the immediate area. Human decisions and failings are blamed, and certain agents – most notably the US Army Corps of Engineers – are directly called out in the physical and social devastation, while others – like the Orleans Levee Board and local environmental activists – are absolved. This memorial, then, serves not only to commemorate a disaster event and the losses associated with it, but directly makes explicit the human factors that created it, that set people up to clash with natural forces in ways that proved destructive to property and lives. A key thesis of disaster anthropologists like Oliver-Smith (2002:27-28), that powerful human agents place the less powerful in the path of risk, is thereby brought to light in a public forum – on a residential street, open to the public with no admission or other condition for viewing, and apparently unmediated by the agencies indicted. The perception (or even illusion) of a natural disaster as an unpredictable force acting impassively on the landscape and the populace is defied and replaced with a set of conditions more complex, arguably more intractable, but the engagement of which at least offers a chance to address head-on the real challenge. Hurricanes cannot be turned off or turned away, but unequal social structures, inadequate (or ill-advised) construction, and human actions affecting the
immediate environment can – at least in theory – be corrected when made visible. The explicit “Levees.org” sponsorship of this memorial provides opportunities for further education and engagement for visitors to the website of the group.

The large memorial on Canal Street, meanwhile, shows a different dynamic at play. It is first signified by a device on the metal fence surrounding the space: the fleur-de-lis, symbol of the city, combined with the ubiquitous “hurricane swirl” (Figure 10.) This conflation of local identity with a distinctive meteorological event instantly transmits a message to anyone who understands the meaning of those symbols: “this happened here, to us.” It also effectively makes the hurricane a part of that “us.” Inside the fence, as noted before, the swirl shape of the memorial itself extends that association – here is the hurricane permanently inscribed onto the physical space, made part of the fabric of the city itself. But the connection goes even deeper. This memorial is not only close to some of the local cemeteries – it is

Figure 10 - Fleur de Lis/Hurricane symbol, Katrina Memorial, New Orleans (Photo by the author)
itself a resting place. Interred here, in above-ground vaults of the type common to this city due to the high water table, are the bodies of 83 people unidentified or unclaimed after the storm. As Casey notes, places are constituted in part by “lived bodies” (1996:24). In any cemetery, the past tense of that “lived” is key, but with a grave marker, at least identity may be maintained. For the individuals in the New Orleans Hurricane Katrina Memorial though, their city and the event that ended their lives may forever remain the only identity they can have. In this memorial, then, place, body, disaster, and memory are fundamentally and inextricably combined.

Following a hunch and wanting to explore this blending further, I delved back into the literature and found that the “X” marks left by searchers after Katrina have come to be somewhat iconic to many New Orleanians as well. At least a few residents have purposely left them on their property as a mark of pride taken in survival, as Romaguera (2015) notes. "Baby, you know that's never coming down,” insists his neighbor referring to the mark on her own house. In fact, she had the markings redone when the building was repainted. She feels the mark sends an important message. "I think spiritually and historically it should never be removed... this house was protected, we got proof that no one died here. We got proof that this house was blessed, that it's still standing... [it's a] reminder of how blessed we are, this city is.” Besides the obvious power the mark holds for her, one cannot help to notice the contrast between her insistence that New Orleans is “blessed” and the suggestions of some parties that Hurricane Katrina was God’s punishment.

Katrina-related tattoos, some of them incorporating the “X” mark iconography, can also be found (Gentry and Alderman 2006:184-196), extending the phenomenon of the disaster becoming one with the people who endured it. Other tattoo designs combine the fleur-de-lis and hurricane symbols in a manner similar to the gate on the Canal Street memorial. The tattoos are also memorials, like the ones already discussed, but are living and mobile ones, making their owners’ “feelings visible not only to themselves on a daily basis but also to a larger public” (Gentry and Alderman 2006:186). Each of these
memorials is attached to a person with the lived experience of the hurricane – again, as Casey maintained, “lived bodies” turning mere space into place, and maintaining a past event in the present. “This was so people could not forget what happened... what is happening,” explained one tattooed survivor. “We mustn’t forget (Gentry and Alderman 2006:190).” Even if some Gulf Coast residents are unwilling or unable to share their hurricane stories, many, fortunately, recognize the value in doing so.

4.6  Facing the Flood

You know, people ask me all the time, "... and you moved back there after?!?" Yeah! Because no matter where you go, something is out there that could get you. You could live in California, and be part of a mudslide... you could be in Colorado and be in a, you know... something from snow... whatever. I know a lot of people that have been in country that are subject to fires, you know? So there's no such thing as safety - complete safety. You just have to know how to handle whatever the elements are going to be, because there are going to be some elements.

As Kenny said to me, natural disasters can happen almost anywhere, sometimes with little or no warning. Yet for people in tropical storm zones like the Gulf Coast, they are virtually guaranteed, and comparatively predictable. Every year brings the hurricane season, and modern weather technology can give us hints of coming hurricanes some time before they even earn the name.

“We’re watching 99L”, said Paul at the beginning of our interview, roughly halfway through the 2016 hurricane season. He was referring to Invest 99-L, then an “unorganized weather system” in the Caribbean that, under the right conditions, could have developed into a tropical cyclone (LaRose 2016). As it happened, the Gulf Coast got through 2016 relatively unmolested. However, flooding in Baton Rouge, Louisiana after heavy rains there in August brought back haunting memories for many in the area, including some who had relocated there after Hurricane Katrina (Bullington 2016). Then, as Kenny and I talked in early February – well out of the 2016 hurricane season and well before that of 2017 – our
conversation was punctuated by glances at the weather report on TV and at the heavy clouds and rain showers outside – a serious tornado warning was in effect for the region. Even as I drove out of town that day, tornadoes did in fact strike not too far away, doing serious damage to parts of New Orleans and its suburbs – a frightening and tragic reminder of what had brought me to the Gulf Coast in the first place.

Still, the people I talked to in the Waveland area were virtually unanimous in assuring me that life on the Gulf Coast was worth the risk – a risk that can be managed by paying attention to weather reports and warnings, and being prepared to evacuate. Rick explained his point of view when we meant on a day that was sunny and warm despite being midwinter:

Understand, you get 98, 99 percent of the year where - beautiful weather - you know, acceptable climate and everything... and you're going to have one or two days of the year or more, a few more maybe, where you're going to have to do something that - that's out of the ordinary, and that is to leave if you have to, or go stay with family elsewhere - get yourself out of harm's way. 'Cause out of all the calamities - earthquakes, volcanic eruption, whatever... those calamities you're not gonna get advance warning, advance notice... even tornadoes. I mean you know, we'll set up a tornado warning, and hope that people get outta the way, but they're so fast... it's really hard to react. Hurricanes - you can see them coming days away. There's no excuse for somebody to make this irrational decision to stay put.

Nora spoke along similar lines, adding her own strategy, based on long experience, of gauging potential hurricane danger by noting the path of the hurricane in relation to her own position whenever she might be attending to the weather reports:

When you live in this area ... once you're an adult, and you learn how to listen to weather reports and all... the first thing you learn, if you grow up around hurricanes, is that you learn from the meteorologists that when that 'pie' is coming at you, it's sliced in four pieces. And that northeast quadrant is where you don't want to be. You do not want to be there! So if that pie is here, and I am over here, in Lafayette, and that pie is
at the mouth of Mississippi River I'mma be OK, 'cause I'mma get that wind coming from the... north and the west. It's gonna blow the water away from me. But if I'm over here in Mobile, I'm in a bad spot, 'cause I'm in that northeast quadrant, and it's gonna get me. It's gonna push the water, you see, at you like this coming out of the Gulf of Mexico, which is a basin, so you know when they get in the Gulf of Mexico, there's nobody gonna escape.... I know how to slice that pie!

Relying on modern science and keeping an eye on the weather are powerful practical tools, but I also saw how the congregation at St. Clare relies on less earthly measures. Three of the four masses I attended there included a prayer “for protection against violent storms this season.” The first time I heard this, I could not help a glance out the church windows that look out onto the Gulf, the watery expanse that had conveyed storms which dealt destruction to at least two former incarnations of the building.

Nevertheless, a common theme in accounts from my interviews and the literature was along the lines of the old aphorism “God helps those who help themselves” – prayer offers solace, faith draws people together to help one another and can deliver hope for recovery, but preparation is key. “I think God gave us a brain as a gift,” Nora continued in our discussion. “But I think He expects us to use it too and not just test nature.”

Just as Kenny described in the passage that opened this section, outsiders might question how people can live in such a place, which regularly threatens destruction and death. The overly simple and obvious answer is that it is their home – that place to which they feel the strongest ties. As Helen and I talked, she fondly recalled how during her childhood she would daily walk with siblings to meet their father at the train station as he came in from work. Her father no longer lives and the train no longer runs, but the tracks are still present, and played their role in limiting the damage from Camille and Katrina. Their physical presence and her memories of events connected to them still contribute to build her sense of the place she still inhabits. Jerry told how just after Camille, he was married in the rubble of what had
been the first St. Clare building – his life history runs like a thread through the various incarnations of the church. Paul, likewise, stressed his deep connection to Waveland: “My father died in 1960, and literally, I was raised by the town... this is my roots.” He related that he and his wife have plots reserved at the Waveland cemetery – he intends to inhabit the place even in death. “I know who I am, and I know where I’m going,” he told his wife when he showed her the plots, years before, and “Until the good Lord takes me, I’ll be trying to help out in any way that I can to promote... the community spirit here in Waveland.” His role in responding to major hurricanes, and helping to rebuild afterwards, can only have increased and strengthened those roots – his actions have helped weave the fabric that is the town’s actual current physical presence, as well as its history. The role of the hurricanes in that history, the assemblage of experiences of the people of Waveland, of Bay St. Louis, and the other communities arrayed along the Gulf Coast cannot be denied. They must be read to be as much a part of the sense of place as the sea, the beach (the artificial nature of the Mississippi beach notwithstanding), the shrimp, the oysters. Ocean Springs resident Mary Anderson Pickard made this association explicit herself: “Hurricanes are integral to the Gulf Coast. Like beaches, marshes, sandbars, and humidity... hurricanes are intrinsic vital elements of this place.” However, she takes it further, even positioning the storms, despite their destructive potential as a positive force. “Hurricanes stimulate, shaking us and awakening us to a new awareness” (Pfister 2007:158). We must by no means read hurricanes as defining the identity of place or people, despite their power over both. Instead, they are acknowledged by people and the places they make, and embraced with some enthusiasm by certain residents, including in lighthearted, even affectionate ways, such as Bay St. Louis’ Category 5 bar, or the Hurricane cocktail, invented in New Orleans. Through this process, the hurricane is objectified, almost “tamed” - made a tractable concept rather than a fearful one. Paradoxically, the practice of naming hurricanes - personifying them - may work in a similar way. Photo and video records of New Orleans after Hurricane Katrina display multiple examples of graffiti expressing variations of a particular epithet: “Katrina, you
"bitch!" T-shirts bearing variations on the phrase, or expressing similar sentiments, were common in souvenir shops after the storm (Macomber et al 2011:527-532). (Some can still be purchased online, though I did not see any in shops during my visits.) Anthropomorphizing something as impersonal as a storm can provide a manageable – and infinitely receptive - target for anger. Such expressions may not be materially productive, but they can be therapeutic.

Appeals to religion; objectification of hurricanes, often in creative and playful ways; even the incorporation of disaster history into the local economy: these can all easily be read as mechanisms for coping with the danger of hurricanes. But they are about more than just coping – there is a more proactive and constructive process in place. The process of building place out of space, and in turn transforming place into home, as outlined by Casey and Terkenli, is not periodic, but constant – it happens in the everyday, not only as a response to disaster. The process may be necessarily interrupted by a hurricane or accelerated in the wake of one, but it neither stops nor begins with the event. Instead, the reality of an individual hurricane, and of hurricanes in general, becomes part of the texture of the identities of the places and the people. Like knots in wood, they do not interrupt the grain but are part of it. People on the Gulf Coast portray hurricanes, memorialize them, and prepare for them for the same reasons they go to the beach, eat oysters, dress up for Mardi Gras, and attend Mass at a beachside church – it is what is done there. The fact that hurricanes carry more risk than any of those activities does not dissuade, for that risk can be managed through material and mental preparation based on personal experience – one’s own, or that gleaned from one’s neighbors, as well as information transmitted by authorities.

4.7 When the Water Comes Again

As I began reading stories and watching videos of Hurricane Katrina, including the appeals to God for protection and questions about a motive of divine retribution, before the idea for this project had even
fully formed, two lines from an old gospel song referencing the Biblical story of the Flood kept coming into my head: “God gave Noah the rainbow sign / No more water – the fire next time” (Gunning et al 1937). Despite the suggestion of the song, when Katrina struck it could certainly have seemed to the people of Waveland, New Orleans, and elsewhere on the Gulf Coast that a world-ending flood had come again. Even if not truly apocalyptic, Katrina was undeniably transformative and revelatory – in ways that could be considered positive as well as, obviously, negative. Can we learn productive lessons – find silver linings in a set of almost literal dark clouds? In particular, it was the end of that song phrase, “… next time,” that got me thinking, and ultimately gave this thesis its title. How might Gulf Coast residents take the lessons of Katrina, as well as other hurricanes, and apply them for better results when the wind and water come barreling down Hurricane Alley again?

First, local knowledge and lived experience of hurricanes are valuable assets. People need to know what they have to do to prepare – whether they plan to evacuate or stay home and face the tempest. Supplies and equipment need to be laid in: food, water, a generator, fuel, possibly clothes and paper goods in watertight containers. Such preparations can extend down even into minutiae that would elude an inexperienced person, such as this suggestion from Don:

Another tip for those who might want to... stay after a hurricane or even visit: Get some plugs for your tires! Because the nails from the debris fall everywhere... and I had a compressor so I was like the tire fix-it shop for my family. "Aw, I got a tire that's leaking!" I said, "Bring it over!" I'd put a plug in there, you know, 'cause there's no place to get a tire repaired! No one would think of that!

For those evacuating, a destination must be determined, vehicles fueled, and enough cash kept on hand to fund what could be an extended stay. For those staying, on the other hand, the real dangers that they may be facing must be made clear. As the ethnographic accounts indicate, many people were surprised at the extent of the power and damage of Hurricane Katrina – even those who had experienced a similarly devastating storm in Camille, even given the lurid and detailed warning
transmitted from the National Weather Service. Miss an important warning, and you could be caught unawares. Kenny, with decades of experience watching for and responding to hurricanes, said of Katrina, "We had no clue that it was going to be the storm that it was... we never did get the sense of urgency... and it wasn't even considered in the same category as Camille." However, many people reported that Katrina was a wake-up call to increased vigilance. Taken by surprise by the power of the storm, even hurricane veterans began thinking about plans in place to respond should another large hurricane come through in the future. These plans were not necessarily elaborate – Jerry expressed he would simply load some valuables in his truck and head into inland, onto higher ground in the northern part of the state, where he would be protected from floodwaters and where the storm would likely lose strength quickly as it moved away from sea. Helen and her family would rely on a social network to keep track of each other: "After [Katrina], then it became like, "Oh, we'd better start having something about, who are we gonna contact... ‘OK, let's all tell at least two or three people, this is where I am so, if you need to look for me, tell me something, whatever.'"

Not all storms would necessarily require an evacuation, of course, but residents would still make plans to endure possible long periods without access to necessities and modern conveniences. Such plans would, again, be based on experience of past hurricanes – their own experiences, or those passed down to them, as Nora related:

I can remember my grandmother, she had a little place in the cabinet in her kitchen, under her sink, and all through the summer she'd go to the grocery store. She'd always buy a couple extra canned goods or something. Well, she'd always say "That's just in case of a storm...", you know. So you, you get that mindset to prepare yourself.

She continued, building on her earlier metaphor of the hurricane as a “pie” sliced into quadrants to explain how decisions made by her and her husband would be based on a combination of an informed assessment of the storm’s potential danger and a sober acceptance of their own limitations.
I'm not gonna leave for every hurricane - oh no! No, we didn't leave for Gustav. I'm gonna see where it's going... I'm gonna see where I'm gonna be on the serving platter of that piece of pie... and I told my husband this year - I said, "We're getting older. We don't move as fast as we did. The children have all their homes to tend to, and their little ones to - you know, everything. We can't expect them to come bail us out constantly. We have to be sensible about this.

Kenny also described how his hurricane experience would inform not only his own future actions, but also his advice to others, including younger people or possible newcomers to the area without such experience. Like Nora, he personally would not necessarily evacuate for just any hurricane (“I'm not afraid of a [Category] 3”), but recommended prudence, especially for those whose own hurricane history might lull them into a sense of security:

The main thing is... you're aware what's going on, and you put yourself as far out of harm's way as possible... If you're going to go, leave in advance - two or three days, don't wait and get caught up in the traffic trying to get out. And that's a mistake a lot of people make, and that's how people get hurt - they get caught up in that, and they swear "Well, if this ever happens again, I'm not going anywhere." Well guess what? If they live in a low-lying area - and we do have people that will try to weather 'em out. That's why we've had people get killed in these things - just because they thought they were smarter than the storm. I would always suggest to anyone that's in an area that is threatened by a storm or hurricane, if they haven't been involved before, get out. Go. And that's ... just good common sense. I have a healthy respect for the weather!

Rick described how his own mindset had changed. While people need to be realistic about the potential actual dangers of hurricanes, as per the dramatic content of the Katrina announcement, they should use awareness of that danger to make wise preparations. The government could enable this process, he said:
I've come around - we've got to get out of this - as an agency, as government - to instill fear in people. We need to instead just educate and get people to do it and reduce hurricane threats to just simply an inconvenience of life... and it shouldn't be a life-threatening thing - it just should be a mere inconvenience. And yes - you may lose your house, you may lose your stuff, but stuff you can always replace. You can't replace a person.

His own agency has responded by taking new tacks in how it communicates information to the public, that may prove beneficial in the face of future hurricanes:

They actually have social scientists that look at the stuff... like the proper wording, and even down to the what color schemes to use on the legends in the mapping - do you use multicolor or do you use one color? They do all this social science "sciencing" of the whole process now, and that's a great thing, and I could... attribute aspects of Katrina to getting that going. So I think we've matured as an agency in that regard.

Martha acknowledges that for residents of a hurricane zone, living with and anticipating the storms are not static conditions, but evolving. She also recalls the constant theme of keeping faith in God but also dealing with the environmental reality of hurricanes in a pragmatic way:

Accept what happens, but learn from it. You know, certainly take precautions too. But... I don't really feel like God gives you anything to be - to say "Well, I'm going to punish this person 'cause she did such and such." No. it doesn't happen that way. I think it's- I think it's always an opportunity to grow spiritually through anything you experience in life.

For my interviewees, then, the relationship with hurricanes on the Gulf Coast has a fair amount of nuance and texture. It boils down fairly simply, though: hurricanes themselves may be stressful, and the most powerful of them can take away nearly all one has and, temporarily at least, transform a community and a way of life. However, such a risk is fairly small, and can be managed through
information and preparation. Employing experience – one’s own as well as that of others – can ensure that lives are not lost along with possessions and buildings. As long as members of the community – actual human lives – remain, the rest can be rebuilt. Human compassion and generosity will enable that rebuilding. And, for the specific individuals I worked with, those qualities are often informed by, and manifestations of, faith in a divine force which is not punishing, but rather uplifting and inspiring.

Whether it’s the relaxed beach town lifestyle of Waveland and Bay St. Louis, or the “laissez les bons temps rouler” attitude of New Orleans, residents of the Gulf Coast find life there worth living too much to run from a real but small risk of wind and rain.
CHAPTER 5: READING THE WEATHER – ANALYSIS

Just as looking at a satellite aerial image of a hurricane gives no indication of the havoc occurring beneath the spiraling clouds, so can looking at a disaster from the distance of a theoretical perspective and a literature review obscure the realities on the ground. This is why ethnography can provide valuable insight. Even with a relatively small sample size, patterns of thought, perception, and action emerge that can prove revealing.

Waveland’s role as a virtual suburb of New Orleans, and that city’s own role as a major US port, validated and enabled putting people living in those places in the path of hurricanes. Other factors of the immediate area of Mississippi, such as the Stennis Space Center and the Biloxi casinos, contributed further to this dynamic, and continue to do so. For those who find the coastal lifestyle appealing, there is opportunity for income here. In this way, socioeconomic forces certainly position humans to confront natural hazards, as a central theme of disaster anthropology suggests (Oliver-Smith 2002:28-29). Also, we are able to observe in Waveland and Bay St. Louis the phenomenon of the landscape being reshaped to fit human ends in a manner than can increase exposure to hazards. (I use the term “landscape” broadly, here, for the effect could also be observed in resources which are arguably more strictly aquatic, such as drainage ditches, canals, and the sea itself.) This was exhibited on a grand scale in Colten’s examination of New Orleans, but we can see it at work in the smaller communities as well – the construction of the concrete seawall along the coast, to guard against erosion of valuable oceanfront property as well as dangerous storm surge, and later the beach, which had the synergistic effect of attracting both more residents and more tourists to the area, increasing the economic viability – and therefore livability - of the area. Perhaps the most dramatic marker of the effect is the railroad line, which offered a major source of support to people who wanted to live in the smaller towns – they could easily commute to the larger cities for work. Over time, this new landscape feature, constructed for economic and other infrastructural reasons, came to be relied on to provide a degree of flood protection.
for Waveland. This function remained even once the railroad’s economic and lifestyle functions had largely passed away. Trust put in humanmade features, and the systems that produce them, to protect against natural, sometimes hazardous forces, the application of perceived order as a bulwark against perceived disorder, is also a major component of disaster anthropology theory (Oliver-Smith 2002:29-32). We could read the levee effect of the railroad failing to protect against Hurricane Katrina’s storm surge as an object lesson of that at work – nature in that case had the ability to overcome the outcome of human effort. The railroad’s secondary function had gone the way of its primary one, and human trust in a technological product was betrayed – the same technological product that had had a partial role in exposing them to a natural hazard in the first place.

Meanwhile, as in the risk society model, the process is abetted by still other powerful actors – scientists that issue weather reports and forecasts, emergency responders that offer the promise of aid, insurance companies that may alleviate the burden of hurricane impacts, and government agencies that may also perform any or all of these functions. This kind of trust placed in human institutions can be seen as directly proving the risk society model. Weather systems forming hundreds of miles away cannot be perceived, and information about their existence and progress transmitted quickly, without modern technology and communications networks. Even if they could, how to evaluate the strength of the storm without an expert model for doing so, like the Saffir-Simpson scale (A. Stewart 2011:115)? Storm surge danger, too, cannot be readily calculated by most coastal residents, even those with abundant hurricane experience. In this way, hurricanes are outside “human powers of direct perception”, as Beck describes certain hazards (1992:27), until it may be too late to escape them. Another proof might be the apparent contradiction offered by the different capabilities of personal response to hurricane threats. Class can affect one’s ability to avoid a hurricane, as well as to recover from it once it happens. People with more money have a greater facility to evacuate than those with less, and may have more financial resources to draw on to enable recovery and to maintain life in a
hurricane-prone area. This can include everything from buying material goods to replace those lost, to counseling to overcome psychological impacts, to the high cost of insuring a home against flooding. In this analysis, immediate safety – in the forms of evacuation ability or structural defenses against wind and flooding, for instance – and long-term welfare – such as insurance, post-storm supplies, health care – become just another set of commodities to be purchased, reifying the socioeconomic power arrangements that also often put people in the path of hazards. This, too, reflects Beck’s observations (1992:35-36). It could easily be argued that modern scientific and economic systems in fact enable people to expose themselves to hurricane risk – they are, in this way, maladaptive for people like Gulf Coast residents.

However, these analyses break down somewhat when the reality in the field is examined, as portrayed in my ethnographic findings. For instance, class can certainly provide a buffer against disaster, but it may also be effective in putting one in increased danger, as in the case of those who can afford beachfront housing which is the first to be struck by storm surge. Meanwhile, modern weather and communications technology can flatten the risk disparity to a certain degree – in the early 21st Century, even relatively poor people may be likely to have a television, or at least a radio, to be warned of impending danger. However, even in the face of reliable advance warning, many people, even with the financial means, cannot or will not evacuate, for a variety of reasons which may be highly individual but recur throughout the population, such as underestimation of risk based on previous experience, commitments to others, or simply a desire not to leave one’s home unattended.

This shows that, among the populace, there are more subtle processes at play than may be easily predicted or explained by reading disaster anthropology or risk society models too closely. Yes, people may have been drawn to a particularly hazardous area by features of modern life, but within that situation they display their own allegiances to the area and each other, and a good deal of informed
agency in dealing with the realities of the hazards they face. They also display a level of awareness of the social factors that put them in that place, and how to negotiate the challenges they present.

For instance, residents do rely on the weather reports for information on coming storms and what to expect from them. However, they interpret them and make their plans based on their own experience, an assessment of their own preparedness, and awareness of their homes and the surrounding terrain. In Waveland, for example, houses close to the beach are more likely to suffer storm surge. The elevated line of the railroad tracks was traditionally trusted to provide some protection, at least for houses to the north. Hurricane Katrina showed that even the railroad tracks may not be a reliable defense. Still, this did not mean that the tracks offer no defense – they had in fact limited damage in past hurricanes, and could very well do so again in the face of a lesser storm, or one in which storm surge proved to be not so powerful. The limits of the protective resource represented by them simply had to be revised. Likewise, residents’ decisions as to whether to evacuate might be informed by the direction and angle of attack of a hurricane and a judgment of its likely damage, as Nora’s “pie” metaphor indicates. These are all part of a practical toolkit residents maintain and, with the receipt of new information or experience, periodically add to. They make plans – whether vague or detailed – to evacuate when a “big one” comes, or to supply themselves to withstand and recover from major impacts to the community and the infrastructure that maintains it. These may be individual or joint efforts, but they are informed by a body of knowledge acquired over years of life in the hurricane zone, and witnessing storms of varying intensity and effects. Besides one’s own knowledge, information can be passed down through generations, or shared peer-to-peer within the community.

Besides this, I have indicated that people not only engage with, but are themselves part of the mechanisms of power and information generation and transmission. Gulf Coast communities themselves contain members of the economic systems that support human life in the area, and of the government bodies charged with disseminating weather information and responding to crises. Two of
my interviewees, Paul and Jerry, played first responder roles during major hurricanes. Trust is placed in them by the community, certainly, but they in turn act out of a sense of duty to that community. Another interviewee, Rick, used his role as a government meteorologist to drive home the danger posed by Katrina. His actions were recognized as limiting loss of life. His agency, in turn, has altered tactics to improve readiness in the future. Such agencies, then, can be seen as not quite so monolithic and self-interested as some analyses would suggest. Rather, they are at least somewhat organic and responsive to pressure to change from within – their members – and from below – the populace. All this represents a much more nuanced and active approach to the position of communities in hurricane zones than might be represented by the largely top-down models of Oliver-Smith’s broad disaster anthropology theory, or Beck’s risk society. This is not to deny the validity of such models in certain applications – only to show that within them there may be a great deal of texture, representative of the gap that often exists between theory and practice.

Gulf Coast communities and their residents are, then, not passive victims of hurricane risk or of human forces that expose them to that risk, but active negotiators with both forms of reality. But furthermore, the term “community” is multilayered – not only representative of a geographically bounded collection of residences, businesses, and civic buildings. Embedded in civic communities will be any number of religious communities, at least one of which a given resident is likely to be a member. These may provide their own benefits. Although a religious faith by no means should be considered a requirement for surviving and recovering from a disaster, many people do find personal strength and hope as a result of their faith. They may also take from it a sense of purpose for the disaster event – even if they do not ascribe divine power as the cause of the disaster, as such, they may come away feeling they have a new insight into something God wanted them to understand about the possibilities of human nature – our capacity for kindness and fairness as well as apathy and greed. Regardless of what they may get from religious faith itself, interpersonal ties within and between religious
communities tend to replicate and bolster ties through secular ones. All this was observed by Chan et al. (2011:177-178), but I also saw how it played out in my ethnographic findings. Many respondents, even when they did not see hurricanes as directly resulting from divine action as such, nevertheless came away feeling they had learned a lesson that may have intended for them by God, and expressed an appreciation for the role of faith to bring people together in a time of crisis. This feeling may ultimately prove adaptive not only in coping with possible anxiety in the face of an impending hurricane, or stress during and after the storm, but in strengthening bonds in the civic community by building on those in the religious community. The hurricane experience may contribute to a heightened recognition that a neighbor is not just the person who lives next door, but also a brother or sister in faith – a fellow child of God. These connections will tend to maintain even when disaster may sweep away the physical manifestations of these communities – buildings, streets, and so forth. The congregation of St. Clare continued as a relatively coherent group, even as two major hurricanes knocked down successive incarnations of the church structure. In the absence of a building, members held services in the rubble or in a donated Quonset hut – while a building could be appreciated, it was the group and the rituals that remained vital.

These social networks offer considerable material support and emotional succor during the recovery period. However, they also prove valuable during the rebuilding of the physical environment of the community. Important to restoring the vitality of the community and ensuring that it return in a way that will be functional for its residents is to recreate the sense of place: the sometimes ineffable, but always recognizable, elements that make it a home to which they remain devoted despite the risk of disaster. In a situation (for example, Waveland immediately after Katrina) where so many physical markers of place – street signs, familiar buildings- are gone, the lived experience (or, as Casey put it, “lived bodies”) of residents will be all the more important in holding the community together. In the case of Waveland, they proved to be absolutely vital, as Bradford and Loebenberg noted (2014). Human-
made reminders – memorials, museum exhibits – reify and transmit the hurricane experience but are also incorporated into the community identity through their presence in the physical space. Structures – theoretically even ones identical to those lost – may be rebuilt, street signs replaced, but shared experiences will serve as the immaterial yet vital scaffolding on which the sense of place will be rebuilt. Similarly, physical markers of the hurricane’s effects may be erased through the reconstruction of the physical space – over time, there may be fewer and fewer ruined structures and uprooted live oaks one can point to and say, “the hurricane did that”. However, records of narrative accounts, memorials, and museum exhibits – including curated physical artifacts – may remain to tell the story, to preserve the footprint of the event which became part of the shared experience of the place, as well as to serve as a lesson to future residents about the real dangers of such events, and the best ways to prepare for, respond to, and recover from them. What Dawdy observed – the necessity of involving residents in the passage of remembered place from one form to another – certainly comes into play here. Beyond this, though, a message of resiliency is conveyed, that can galvanize long-time residents and reassure newcomers. This is even apparent in the more lighthearted ways hurricanes are objectified. Bars, cocktails, hurricane parties, t-shirts and other media denigrating the storm like a human object of scorn - these do not just glibly make light of what has been, for many, a tragedy. Rather, they send a statement: “We survived this. We’re still here to talk about it. We can even laugh about it. We’re ready to face the next one.” Hoffman’s analysis of the power of symbols in interpreting disasters and in of sharing memories in aid of recovery is clearly validated here. This includes her observation of the human reaction to disorder, as defined by disaster’s effects on the human (ordered) world (Hoffman 2002:123-124). Even as “place” is still being rebuilt, symbology, that tool of communication particular to humans, comes into play: the human stamp of meaning is put on the disordered space and, indeed, on the disaster itself (Hoffman 2002:125-130). All this will be even more important as time goes by and the populations of these places change. Memory and local knowledge, if not given physical, long-lasting
form, may be diluted as people leave the community and are replaced by inexperienced newcomers. This may even happen by force, as in the cases of Waveland and New Orleans, where large portions of the populations left for good. The potentially life-saving information that can be learned from hurricane stories – how to prepare, what to expect, the real dangers – must be constantly reinforced. The Katrina Memorial on Canal Street in New Orleans even addresses this directly, insisting in text inscribed on the stone that it must “call us to constant preparedness.”

However, it is not only the dangers of hurricanes themselves that should be transmitted. The social factors in disaster vulnerability must be recognized and addressed by the populace, even - perhaps especially - at non-crisis times, so they can be mitigated or removed before disaster strikes. After Katrina, this was most obviously put on display in New Orleans. As much of the memorial material showed, many residents were well aware of the responsibility of the US Army Corps of Engineers in building the sub-par levees that failed the stresses imposed by a mid-range hurricane and flooded 80 percent of a major American city. Less clear from my visits there was how much had changed since Katrina. Major improvements to the local flood-protection system were enacted, costing billions of dollars, have been enacted (Rivlin 2015:387), but will they be enough? In the longer term, how might New Orleanians respond to more fundamental urban redesign and retrofitting proposals that would make the city more flood-resilient, but also would also be likely to dramatically change parts of its physical and, eventually, socioeconomic layout? Proposals like this are one aspect of hurricane recovery and readiness that Boyer examines (2015:240-243). However, as she describes, this question becomes especially pointed for the residents who labor with more immediate concerns, such as income security and safety from New Orleans’ rampant crime.

Meanwhile, Waveland and Bay St. Louis are in a different situation – not as dependent on monolithic infrastructure as New Orleans, but also virtually open to storm surge. A few of my interviewees mentioned the prevalence of low incomes in the area, that could leave some people unable to evacuate,
and with no material safety net for survival and recovery. What has been done, on the individual and community levels, to address the income disparities that open people to risk? What can be done?

This points again to the need for strong community ties that people can draw on. Those who may be materially deprived will need to depend on the support of a reliable community. Where they may be socially isolated as well, they must, as much as is possible, be brought into the fold. This will not only promote individual survival, though. Wooten (2012) showed the success of local networks in ensuring that community recovery and rebuilding happened in as much an equitable manner as possible.

Similarly, some of my interviewees remarked on the preferential treatment wealthy and connected survivors received after Hurricane Katrina, even though the storm itself was largely unbiased in its effects on Waveland. Continuance of such patterns threaten the social cohesion upon which the community will depend for its continued survival and resilience, especially in the face of future hurricanes. As Rick reported, at least some government agencies have been working to improve their performance in the face of disaster. This is of course beneficial – a major disaster may require the support of agencies with vast resources. However, the value of local knowledge and connections must be recognized and employed, rather than ignored or unfairly exploited, to ensure successful response and recovery – not only by officials, but by communities themselves. Without extensive and ongoing public engagement, the most cynical interpretations of Oliver-Smith’s overarching disaster anthropology theory, and Ulrich Beck’s risk society – that individuals and small social groups are feckless victims of self-limiting and defeating cultural systems and of impelling and uncaring power structures – threaten to assert themselves more strongly in reality.
Disasters are frightening things. As with so many things humans find frightening, they can also be powerfully attractive – not only by virtue of the sheer spectacle they sometimes present, but also by the array of resonant human stories contained within them. This may be especially true for a hurricane, which can have such profound and wide-ranging effects, and it was certainly the case for Katrina, which continues to draw people to it nearly 12 years later. I was of course among them – even now it remains difficult to pull away from. There are as many accounts as there were people affected, and each one seems to reveal some new dimension of human relationship to a powerful and recurring environmental force.

I admit I was drawn to this subject at first by a sense of righteousness – I saw Hurricane Katrina’s effects on New Orleans as an injustice committed by powerful agents – short-sighted and shiftless individuals and groups in federal and state governments (particularly the US Army Corps of Engineers,) which must not be allowed to happen again. I also, though, saw room to explore the public’s awareness of the conditions and systems that had exposed them to risk. Within that, I wanted to explore what I perceived as a possible tension between such awareness and reactions that appealed to divine sources. In those early planning stages, I had planned to work primarily in New Orleans. However, I was lucky and appreciative to be introduced to Waveland and Bay St. Louis, as the effects of Katrina on Mississippi, though widespread and often severe, were notably less well-known – stories there could be as dramatic as the more heavily publicized ones. The smaller towns also offered an interesting contrast to a large city, given the (arguably) closer-knit populations and the lower reliance on intensive infrastructure.

I was not surprised by the variety of hurricane accounts I found in Mississippi, or their dramatic nature. However, it was interesting to see that, at least in my sample set, people were not inclined to directly lend anything like a divine retribution motive to hurricanes themselves. Some did find they learned, or were reminded of, lessons of how to behave and relate to one another that may have been
intended by God. Overall, though people were most impressed by, and proudest to speak of, the ways their neighbors, as well as volunteers visiting from far away, contributed their material resources, their hard work, and their positive, compassionate attitude to aid in physical as well as emotional and spiritual recovery.

Perhaps most remarkable to me, though, were the ways in which so many residents eagerly told their stories of hurricanes and their preparations for and reactions to them – told them personally, to me and to each other, or through media like memorials and museum exhibits. Much of this was of course through narrative, photographs, and artwork, but a significant portion was performed more subtly, though the use and combining of symbols of hurricanes, place identity, and community identity. While hurricanes could result in tragic and traumatic outcomes – loss of life, destruction of property and familiar and beloved features of place – they are nevertheless accepted as fundamental features of the local environment. Some relics of their passage (recovered artifacts, the “X” search marks) are even exalted as symbols of resiliency. This phenomenon, of tying one’s identity and character to even dangerous features of the environment, is one with which I may do more work in the future.

So, even aspects of the environment which may be well-understood scientifically may engender a range of varying human interpretations and relationships. Hurricanes appear to be no different. Some of these relationships, as with many factors of human existence, are translated through, and mediated by, the lens of religious faith. That this should be so for hurricanes is not surprising. They are awesome forces which are easy to compare to the wrath of an angry God, and of course many stories from the Bible, as well as the Torah and the Koran, present “natural” disasters as being divine tools for warning or punishment. However, religion can in turn be processed through a mindset which is also at least partly shaped by modernity. In this mode, explanations from the social as well as the natural sciences are accepted, but room is still made to find divine power and intent, often seen as the inspiration for compassionate, rather than judgmental, human response. My ethnographic work found this way of
thinking to be common in Catholic Christians at my field site. However, that is not to say that some religious people will not lend a divine retribution interpretation to disaster. Such was certainly the case during and after Hurricane Katrina, as some of the sources that prompted this work will show. The takeaway from this is that religious responses to disaster – perhaps even to a greater degree than secular ones – display significant variety and nuance. Further work in exploring this aspect would likely uncover even more rich veins of human religious response to disaster – even to the relatively specific field of Gulf Coast hurricanes.

For instance, working through area churches representing other denominations of Christianity might bring forth a different set of interpretations, or more of the same – either result could have interesting implications. Additionally, although my particular field set and set of interviewees did not present noticeable ethnic variation, certain Catholic churches in the New Orleans area have largely – or exclusively – Black and Vietnamese congregations. Would these groups offer a different set of religious responses, regardless of the commonality of their faith? By a similar token, my sample group did not display any obvious differences in economic class. Could this feature, which as discussed certainly affects exposure to the risk of a hurricane, also affect the religious response? These perspectives could be fertile ground for additional research that might deepen understanding of how people in hurricane zones use – or do not use – religion as a tool for coping and adaptive response.

Of course, material preparation and non-religious active responses were also shown to be vital in the face of a hurricane. Evacuation according to a premeditated plan was a key measure noted by many of my respondents. As in New Orleans, economic class and attendant unavailability of funds, and transportation and lodging resources, were likely a major bar to leaving for a number of people in the runup to Katrina, but again, this did not happen to be reflected in my particular sample set. Of my interviewees, decisions not to evacuate were largely based on an underestimation of the severity of the storm, often informed by previous storm experience, rather than financial restraints. Research in
Waveland and other small communities in the Gulf Coast area targeting lower-income people, and with the engagement of local governments, aid agencies, and civic organizations, could drive home the urgency for evacuation in the face of major hurricanes, and also ensure community support for economically compromised individuals, families, and communities.

As Kenny related, many people are shocked that someone would choose to live in the path of such potential danger. But – except for those whose options may be limited by finances, personal or civic commitments, or physical limitations – a choice it is. It may be true that natural disasters are the collusion of great and powerful natural forces with great and powerful social forces that act together to put people in the path of hazards. However, significant and meaningful texture is lost in too strong a reliance on that approach. Within that reality, individuals, families, neighborhoods, and communities retain a great deal of agency, as well as reserves of knowledge and strength to draw on in evading danger, in protecting themselves and each other, and in helping one another recover from stressful trauma, from material deprivation, and from communities fractured physically as well as socially. They are both driven and supported by a commitment to the sustainment of places that have been nurturing and familiar to them all their lives. Part of those places will be the religious communities embedded within them, which have offered members hope, solace, forgiveness, and fellowship.

A hurricane is an awesome event – one that can both excite and terrify, that can rearrange the lives of individuals and communities or end them outright. They cannot be stopped, but they can be anticipated, predicted, prepared for, and even – after the fact, or in the abstract – almost venerated. They can lay bare the powerful fiction of human social structures, but also inspire human to transcend those structures and connect with each other in ways they never thought possible.

Even as I was finishing this document, Arlene, the first named storm of the 2017 hurricane season, was roiling in the central Atlantic Ocean (The Weather Channel 2017). Far out at sea, it likely would prove no threat to land, but it was early in the season – over a month before the usual start of the
season in June... plenty of time for more likely candidates. Even if 2017 should prove uneventful, there would always be next year, and the year after. Eventually, the wind and water will come again to Waveland and Bay St. Louis, to New Orleans and Biloxi. Hurricanes are not going away, but for the foreseeable future, neither are those communities. Next time the forces of nature bring a major hurricane to the Gulf Coast, its people will be ready, armed with shared experience, community connections, a devotion to home and tradition, and a faith – not fear – in the power of God to see them through.
REFERENCES

BBC News

Beck, Ulrich

Boyer, M. Christine

Bradford, Sabrina, and Abby Loebenberg

Brinkley, Douglas

Bullington, Jonathan
2016 For Katrina Survivors, Louisiana Flooding “Feels Like It Follows You”. New Orleans Times-Picayune, August 15.

Burnett, Evelina

Carrus, Giuseppe, Massimiliano Scopelliti, Ferdinando Fornara, Mirilia Bonnes, and Marino Bonaiuto

Casey, Edward S.
Chan, Christian S., Jean E. Rhodes, and John E. Pérez

Chick, Jack
2008 Somebody Angry? Jack T. Chick LLC.

City-Data.com

City of Waveland

Colten, Craig E.


Committee on Homeland Security and Governmental Affairs

Cooperman, Alan

Dyson, Michael Eric
2006 Come Hell or High Water: Hurricane Katrina and the Color of Disaster. New York: Basic Civitas.

Gentry, Glenn W., and Derek H. Alderman

Gunning, Sarah Ogan, Jim Garland, and Huddie Ledbetter
1937 God Gave Noah the Rainbow Sign. Recorded by Mary Elizabeth Barnicle, Pineville, Kentucky, January

Hayden, Bridget
Hoffman, Susanna M.  

Holcombe, Emily  

Holmes, Steven J.  

Koch, Kathleen  

LaRose, Greg  

Levees.org  

Lee, Spike, dir.  
2006 When the Levees Broke: A Requiem in Four Acts. 240 min. 40 Acres and a Mule Filmworks and HBO. Brooklyn, NY.

“Lower 9+10”  

Lewicka, Maria  

Macomber, Kris, Christine Mallinson, and Elizabeth Seale  

Martin, Andrew  
2005 Mississippi School Rises From The Rubble. Sun Sentinel, November 11.
Masters, Jeffrey

Montana-Leblanc, Phyllis

Monti, Lisa
2015 Deep in Debris, Waveland was Katrina’s Ground Zero. Clarion-Ledger, August 21

Oliver-Smith, Anthony

Pardee, Jessica Warner

Pfister, Sally, ed., and Melody Golding, photog.

Rivlin, Gary

Romaguera, Christopher

Scharff, Robert G.

Smith, James Patterson

Smith, Mark M.

Stake, Robert E.

Steinberg, Ted
Stewart, Alan E.  

Stewart, Stacy R.  

Terkenli, Theano S,  

Trumbo, Craig, with Michelle A. Meyer, Holly Marlatt, Lori Peek, and Bridget Morrissey  
2013 An Assessment of Change in Risk Perception and Optimistic Bias for Hurricanes Among Gulf Coast Residents. Risk Analysis 34(6):1013-1024.

Wacquant, Loïc  

Walters, Brooke A., Christopher F. Drescher, Brandy J. Baczwaski, Bethany J. Aiena, Marie C. Darden, Kaura R. Johnson, Erin M. Buchanan, Stefan E. Schulenberg  

Waveland, Mississippi  

Waveland’s Ground Zero Hurricane Museum  

The Weather Channel  
2017 Tropical Storm Arlene Is Moving Quickly in the Open Atlantic; No Threat to Land.  

Wessinger, Catherine  

Wooten, Tom  
2012 We Shall Not Be Moved: Rebuilding Home in the Wake of Katrina. Boston: Beacon Press.

Zaitchick, Alexander  

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All other photos by the author.
Reproduced below is the full text of the National Weather Service warning of Hurricane Katrina, issued Sunday, August 28, 2005 (Brinkley 2006:79-80). Capitals and punctuation original.

URGENT — WEATHER MESSAGE

NATIONAL WEATHER SERVICE NEW ORLEANS LA

1011 AM CDT SUN AUG 28, 2005

...DEVASTATING DAMAGE EXPECTED...

HURRICANE KATRINA...A MOST POWERFUL HURRICANE WITH UNPRECEDENTED STRENGTH... RIVALING THE INTENSITY OF HURRICANE CAMILLE OF 1969.

MOST OF THE AREA WILL BE UNINHABITABLE FOR WEEKS...PERHAPS LONGER. AT LEAST ONE HALF OF WELL CONSTRUCTED HOMES WILL HAVE ROOF AND WALL FAILURE. ALL GABLED ROOFS WILL FAIL...LEAVING THOSE HOMES SEVERELY DAMAGED OR DESTROYED.

THE MAJORITY OF INDUSTRIAL BUILDINGS WILL BECOME NON FUNCTIONAL.

PARTIAL TO COMPLETE WALL AND ROOF FAILURE IS EXPECTED. ALL WOOD FRAMED LOW RISING APARTMENT BUILDINGS WILL BE DESTROYED. CONCRETE BLOCK LOW RISE APARTMENTS WILL SUSTAIN MAJOR DAMAGE...INCLUDING SOME WALL AND ROOF FAILURE.

HIGH RISE OFFICE AND APARTMENT BUILDINGS WILL SWAY DANGEROUSLY...A
FEW TO THE POINT OF TOTAL COLLAPSE. ALL WINDOWS WILL BLOW OUT.

AIRBORNE DEBRIS WILL BE WIDESPREAD...AND MAY INCLUDE HEAVY ITEMS SUCH
AS HOUSEHOLD APPLIANCES AND EVEN LIGHT VEHICLES. SPORT UTILITY VEHICLES
AND LIGHT TRUCKS WILL BE MOVED. THE BLOWN DEBRIS WILL CREATE

ADDITIONAL DESTRUCTION. PERSONS...PETS...AND LIVESTOCK EXPOSED TO THE
WINDS WILL FACE CERTAIN DEATH IF STRUCK.

POWER OUTAGES WILL LAST FOR WEEKS...AS MOST POWER POLES WILL BE DOWN
AND TRANSFORMERS DESTROYED. WATER SHORTAGES WILL MAKE HUMAN SUFFERING
INCREDIBLE BY MODERN STANDARDS.

THE VAST MAJORITY OF NATIVE TREES WILL BE SNAPPED OR UPROOTED. ONLY
THE HEARTIEST WILL REMAIN STANDING...BUT BE TOTALLY DEFOLIATED. FEW
CROPS WILL REMAIN. LIVESTOCK LEFT EXPOSED TO THE WINDS WILL BE
KILLED.

AN INLAND HURRICANE WIND WARNING IS ISSUED WHEN SUSTAINED WINDS NEAR
HURRICANE FORCE...OR FREQUENT GUSTS AT OR ABOVE HURRICANE FORCE...ARE
CERTAIN WITHIN THE NEXT 12 TO 24 HOURS.

ONCE TROPICAL STORM AND HURRICANE FORCE WINDS ONSET...DO NOT VENTURE
OUTSIDE!