Returning Home and Uncertainty in the Local Newspaper: Risk Narratives and Policy Decisions in the Immediate Aftermath of Hurricane Katrina

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This paper focuses on risk-related themes in the context of the local media's portrayal of the environmental dangers present immediately before, during, and after Hurricane Katrina's flooding of New Orleans. The Times Picayune, a local New Orleans newspaper, is used to identify existing patterns in local media coverage throughout this time period. It is the primary assumption of this research that by identifying the patterns in a chronological sequence of events, the hurricane and subsequent flooding will unfold as a risk saga that influenced public policy during an unstable period in the United States' disaster history. Specifically, this research describes the relationships among the differing types of uncertainties, such as general, legal-moral, social, institutional, and those determined by the rights or interests of property and privacy, to chronicle the events of Hurricane Katrina and construct a risk narrative that shapes local opinion and impacts public policy decisions, specifically regarding survivors' ability to return.

When government agencies and other organizations with social responsibilities want to notify the broad public of eminent environmental danger, they use mass media—typically radio and television news agencies first—to convey such information. These venues communicate the immediacy and urgency of the threats posed. Different agencies use different tactics to inform the citizenry. Likewise, Niklas Luhmann argues that environmental problems are communicated differently by different knowledge disciplines such as "economics, law, politics, religion, science and education [because] they have their own way of defining, coding, communicating, and responding to environmental problems" (Gare 1995, 74), just as citizens have their own way of defining, coding, communicating, and responding to environmental problems. However, this process is often clouded by uncertainty. Edgar Morin notes that "sciences [allow] us to acquire

many certainties, but in the [20th] century they also revealed many uncertainties…Strategic principles to face risks, unexpected and uncertain situations and to modify their evolution thanks to information acquired should be taught. It is necessary to learn to navigate in an ocean of uncertainties across archipelagos of certainties" (Morin 1999 as cited in Biocca 2005, 262), especially as the uncertainties become increasingly ominous. Erikson (1994) calls these dire uncertainties "a new species of trouble" in the sense that the combination of technological and natural or "na-tech" disasters (Picou et al. 1997), such as Katrina, bring about a more menacing and previously unknown series of risks which tend to cause trauma not only to the individual but also to the entire community, which suffers from a form of collective shock (Erikson 1994, 233).

The na-tech disaster is a hybrid of the problems associated with technological collapse and natural catastrophes. Picou et al. (1997) define the na-tech disaster as one caused partly by nature and partly by human or technological failure. Natural disasters obviously have their genesis in nature—earthquakes, hurricanes, tornados, flash floods, lightning fires, etc. Technological disasters occur when parts of a social system fail as a result of unplanned and unfavorable changes in the environment induced, either directly or indirectly, by technological malfunctions. Hence, the flooding of New Orleans is not simply a natural disaster, but rather a hybrid disaster caused when the combined risks associated with New Orleans' topography and extreme storm surges ultimately resulted in several breaches in the levees' structure. Moreover, the floodwaters released stored waste from contaminated sites and oil from damaged rigs in the Gulf of Mexico, making the city one large, toxic mess.

In the aftermath of Hurricane Katrina, the media served as the primary vehicle through which survivors received information and constructed narratives to communicate their experiences and ongoing struggles to reclaim their lives. This study argues that the perception of environmental risks after media coverage of a na-tech disaster is a product of the many contrasting viewpoints produced by media-industrial complexes that compete for domination of environmental issues to forge a single disaster risk narrative. By understanding how local print media articulates environmental risks to "construct" narratives that ultimately help shape local, state, and national public policy agendas, social scientists can develop a more comprehensive picture of the factors survivors use to decide to return home. From these narratives, larger policy debates arise and further refine the framing of environmental risks.

While national and international news outlets brought a unique perspective to the events, local media coverage of Hurricane Katrina offered an immediate source of information viewed in a local cultural and socio-political context. Through local newspapers, we are able to know and benefit from local and regional voices as primary data sources. However, "[d]espite shifting power relationships between competing groups' attempt[s] to promote their version/position, official spokespersons remain[ed] [empowered] to identify, shape and comment on 'the news.' This is particularly significant in the immediate aftermath of tragedy and disaster when journalists are desperately seeking information" (Berrington and Jemphery 2003, 227) to use in constructing news rather than for reflecting events (Coleman et al. 1990), resulting in the media's interpretation and reconstruction of "real" reality to create "media" reality (Scranton et al. 1995).

A Context for Disaster

Before the breaches occurred in the over 300-mile long levee system, local authorities knew that the decades-old structures had been built to withstand only a Category 3 storm. When Katrina made landfall and passed just off the New Orleans area, it was a high Category 4. Even with a history of cataclysmic hurricanes like Betsy and Camille, the city had no comprehensive policy to evacuate people and ensure public order. According to Gilgoff (2005, 27), "Everyone, it seemed, knew the risks. Scientists at Louisiana State University had warned that even a Category 3 storm could dump up to 27 feet of water in some neighborhoods."

On August 29, 2005, Hurricane Katrina made landfall near Buras, Louisiana, with storm surges estimated over 12 feet high along the Gulf Coast. Although the hurricane did not hit New Orleans directly, catastrophe was not averted because "80% of the city…and 20% of the New Orleans metropolitan area [was] below sea level along Lake Pontchartrain. Since the storm surge…was forecasted to be 28 feet high, emergency management officials in New Orleans feared that the storm surge could go over the tops of levees…causing major flooding." (Drye 2005).

However, the physical destruction that Katrina caused is not what is associated with the memories of the aftermath: The destroyed New Orleans landscape was a backdrop for the developing social disasters of equal magnitude. Bullard et al. (2000, and Dreier, Mollenkoph and Swanstrom 2001) contend that it was "more than risk at play: the intersection of race and place affects access to jobs, education and public services, culture, shopping, level of personal security, medical services, transportation and residential amenities such as parks and green space" (Pastor et al. 2006, 9). The relationship between life chances and chronic stressors completes the landscape of risk lived daily by New Orleans' citizens. According to Erikson (1994), life episodes experienced as collective trauma slowly work their way into human consciousness and weaken people's ability to survive the individual trauma or deep shock that results from exposure to risks; these risks and their consequences are often then constructed and played out in the local media.

Risk in the Media

According to Maythen (2004), traditional media outlets have increasingly focused on risk as a topic of concern. Several studies identify the media as the conveyor of risk identification and strategies for safety (See Anderson 1997; Philo 1999; Slovic 1986; Sjöberg et al. 1996; Sjöberg 1998a, 1998b). Moreover, by raising the cultural profile of risk, the media has been identified as an influential factor in risk communication (See Cottle 1998; Kasperson and Kasperson 1996; Nelkin 1987; Maythen 2004). Nonetheless, Beck (1992, 197) describes how mediated communication influences the general public's perception of risk and serves as a catalyst for social and political agenda change. For example when a landscape is abruptly changed by disaster, there is also a change in the way people relate to and interpret the landscape's potential to pose risks to their health. People's relationships with a landscape change as their experiences and memories of that place are altered, which may have positive or negative results. Research in the area of policy agenda setting has examined how media coverage impacts policy by shaping policy makers' perceptions of public opinion. This literature suggests that policymakers sense public opinion through personal intuition and experience gleaned

from the media rather than relying on public poll data, because they lack or distrust polls and because they believe that the media influences how the public understands issues (Herbst 2002; Linsky 1986; Soroka 2003; for citations, see Rogers and Dearing 1988, 579). This use of the media as a proxy for public opinion potentially explains why the media can influence policy, especially at times when policy uncertainty is combined with critically framed and heavy media coverage of certain issues or events (Hawkins 2002; Robinson 2000, 2002). Beck's example of *Der Spiegel*, considered Europe's most widely circulated periodical and Germany's most influential weekly news source, is relevant in that

> [e]ven the right to *freedom of the press*, with all its opportunities and problems of interpretation, offers numerous occasions for the differentiation of large and partial public spheres (from the global television network to the school newspaper) with individually very particularized, but overall considerable opportunities to influence the definition of social problems….But they can also achieve considerable significance for the public–and thus the political– perception of problems, as the political boom of environmental issues and the rise and fall of social movements and subcultures illustrate. For instance, this becomes clear in the fact that expensive and extensive scientific investigations are often not really noticed in the agency that ordered them until television or a mass-circulation newspaper reports about them. People in the political administration read *Der Spiegel*, not investigation reports, and not only because the report would be unreadable, but because society is so designed that politically relevant matters are in *Spiegel*, quite independent of the contents and arguments. Suddenly the result loses any trace of research for private consumption; it haunts thousands of minds and thus demands personal responsibility and public (counter-) statements…(Beck 1992, 197).

Beck further explains that

> [t]he power to define problems and priorities that can be developed under these conditions (and should under no circumstances be confused with a 'power of the editors,' but coincides rather with the editorial work of employees) certainly relies at heart on circulation figures and ratings and the resulting fact that the political sphere can only ignore published public opinion at the risk of losing votes…the consequence for politics is that reports on discoveries of toxins in refuse dumps, if catapulted overnight into the headlines, change the political agenda (Beck 1992, 197).

Hence, these public perceptions become concerns that are elevated to and become parts of the political sphere, the national dialogue, and the larger agendas of political parties. When government officials, scientists, and industry experts read newspaper accounts of a

case such as Katrina, they may take the media's use of conventional scientific and regulatory language and standards and urgings to address the immediate rebuilding process at face value. However, when lay citizens read such narratives, they may view the risks, especially those associated with return, through a lens of uncertainty. "Thus, the health risks posed…[in the post-Katrina landscape] appear to be low, but under certain circumstances, for certain individuals, they may be quite high. Government risk communicators cannot flatly deny the validity of this lay approach to the assessment of risks whereby the analysis is considered incomplete if uncertainties remain" (Krimsky and Plough 1988, 280).

According to Beck (1992, 21), "Risk may be defined as a systematic way of dealing with hazards and insecurities induced and introduced by modernization itself. Risk, as opposed to other dangers, has consequences which relate to the threatening force of modernization…" However, the consequences of modernization are bound up with a variety of social, economic, political, and cultural factors that impact their communication to various stakeholders. Funtowicz and Ravetz (1990, as cited in Biocca 2005, 262) suggest five categories to help researchers understand how risks and uncertainties are communicated and processed by both lay readers of the newspapers and decision-makers (who often reach policy decisions in the early stages of disaster when the immediate and future uncertainties are not clearly defined):

> General situational uncertainty—it characterizes a specific circumstance that should be faced at the moment. It results from different aspects, in particular from informative inadequacy on decisions that have to be taken, and can have a variable intensity.

> Legal-moral uncertainty—it is connected with the possible consequences of the decision that will or will not be taken. The possibility to be prosecuted for a particular action or any way to face one's own sense of guilt in case of a negative evolution influences decisions and often leads to defensive and dilatory attitudes and to a handicapped spreading of information.

> Social uncertainty—it is caused by the degree of cohesion or of conflict, in a community and by the level of integration with institutions.

> Institutional uncertainty—it results from a scarce ability to communicate, comprehend, or collaborate among the different organisms, especially public institutions, that have to manage a problem, and it is enhanced by the traditional jealousy, competition, and secrecy of some bureaucracies.

> Uncertainties determined by rights or interests of property and privacy—they are the consequences of regulations that control the possibility to divulgate or hide information, any concern citizens, professionals, enterprises, organizations and institutions.

In terms of a na-tech disaster, what becomes important is how elected officials and citizen survivors define, code, communicate, and respond to environmental uncertainties in their local environment immediately before, during, and immediately after the event. Consequently, this study turns to the Social Amplification of Risk Framework (SARF) to examine how risk communication works to shape public policy.

According to Powell and Leiss (1997), risk communication has traditionally consisted of a top-down exchange in which risk experts attempt to convey probability estimates of risk events. However, risk communication research has more recently identified the failure of such communication activities, largely because of public skepticism about the motives of politicians (Petts et al. 2001; Bakir, 2006), scientific advisors, regulators, and industrialists (Frewer 2004; Bakir 2006). Accordingly, risk communication research increasingly aims to understand how risk knowledge is circulated within society (e.g., Leiss 1996; Lofstedt and Renn 1997; Petts et al. 2001; Bakir 2006).

The SARF aims to examine how risk interacts with psychological, social, institutional, and cultural processes in ways that amplify or attenuate risk perceptions, and shape risk behavior and consequences (Pidgeon et al. 2003; Bakir 2006). Kasperson et al. (1988; Bakir 2006, 70) "argue that 'risk signals' are transformed as they filter through 'amplification stations' (such as media, pressure groups, politicians etc.), leading to social amplification or attenuation of risk, sometimes producing 'ripples' (such as demands for regulatory constraints) spreading far beyond the risk event's initial impact. The SARF details four main mechanisms of risk amplification: signal value, stigmatization, heuristics and values, and social group relationships." Moreover, according to the SARF, information gained from the print media becomes part of the decision-making process that influences public policy. Specifically, the information given becomes a heuristic (simplifying mechanism) with assigned values that people use to evaluate risk and shape responses to cope with the complexity of risk in daily life. In this way, risk-related issues such as health concerns in New Orleans, public safety, or potable water infiltrate the agenda of social and political groups (Bakir 2006).

To understand the components of a risk narrative and how this narrative impacts public policy, this study uses two research questions (RQ) to guide the analysis:

RQ$_1$ *What characterizes the definition of environmental uncertainty and risks during the immediate impact phase and how does it change during the immediate impact period after the disaster?*

RQ$_2$ *How are the policy decisions, namely for citizens to return home, informed by the risk narratives in the newspaper?*

Methodology

This study uses content-analysis techniques to identify and quantify topics related to the social construction of risk in the aftermath of Hurricane Katrina as described in articles in the region's largest newspaper, and the "paper of record" for Hurricane Katrina information, *The Times Picayune*, from August 27, 2005, to November

9, 2005. This period of news coverage represents the immediate impact and reentry period. By November 9, all neighborhoods in New Orleans had been reopened for return. Although some had not been approved for habitation, citizens could enter the neighborhoods. Articles written during this time period are now known as The Katrina Files[1] and are identified as Katrina-specific coverage by *The Times Picayune*, which serves as the foundation of the Katrina narratives. *The Times Picayune* was selected for three reasons: First, according to Scanlon (2006, 415), "[o]fficials in smaller communities are usually on first-name terms with reporters for the local radio and television and the local newspaper. They believe—usually correctly—that they can count on their cooperation when incidents occur." Second, the *Picayune* stories chronicled as the Katrina Files incorporated a local perspective without ignoring state and national stories about the disaster. In essence, the Katrina Files covered a variety of perspectives to construct a grand narrative of this local, regional and national story. Finally, the paper was selected because it published neighborhood-by-neighborhood assessments of health risks and recovery efforts. While the local media does not drive the national media, such a story, of regional significance, garnered national headlines and served as a major source of information for local citizens and local policymakers needing information from a variety of local regional and national sources to help make decisions. In essence, *The Times Picayune* is a general circulation daily newspaper that provides comprehensive coverage of economic, political, social, and environmental issues in local, state, and national forums. It chronicled the events of Hurricane Katrina from a unique, local perspective and was the only newspaper in New Orleans to remain in press, either in paper or web-assessable format, for the duration of the event.

      Times Picayune articles with risk as primary and secondary themes were identified and systematically selected using the proprietary newspaper search engine NewsBank® Inc. software for issues published during the investigation period. Primary themes are those identified either through headlines or as major issues raised in the first paragraph, whereas secondary themes are the second mentioned, and tertiary themes the third mentioned (Wakefield and Elliott 2003). Hence, of the 4,934 Hurricane Katrina-related articles gathered during this time, 290 have themes of risks associated with the threat of the hurricane's direct hit on the city and region, 44 have themes of risks to human health due to illness, animal bites, contaminated water, and other naturally occurring conditions such as exposure to mold, and 67 have themes of dangers from the threat of unsafe home/building structures or of injury (e.g., puncture wounds) resulting from flood damage. Each full article was used as the unit of analysis, and items were catalogued according to the uncertainty categories defined by Funtowicz and Razetz (1990; Biocca 2005) earlier herein. The primary goal of this study is not to count instances of a word or theme but rather to correlate how the themes interrelate to develop a Hurricane Katrina disaster narrative that serves as a voice for the region.

Content Analysis: Tales of Unsorted Risk

      Early Hurricane Katrina headlines contained with ominous warnings, calls for mass evacuations, and pleas for the citizens remaining to seek shelter in the days before

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[1] The data is accessible *via The Times Picayune* website "The Katrina Files" section at
http://www.nola.com/katrina/pages/ and http://www.nola.com/katrina/updates/.

the storm's landfall. The Monday morning, August 29, 2005, front page of *The Times Picayune* read, "GROUND ZERO: Superdome becomes last resort for thousands unable to leave" (August 29, 2005, A:1), with a second, more poignant title, "New Orleans braces for nightmare of the Big One." Images of empty streets were shown and predictions of "Surge likely to top N.O. Levee System" (August 29, 2005, A:3) were made. There were several references to the Louisiana Superdome being the place where "tens of thousands of less fortunate Orleanians, many of whom lack access to cars, hustled [to as] the 'shelter of last resort' that was opened to the public by city officials Sunday [August 28, 2005] at noon" (August 29, 2005, A:3). With these dire predictions, public officials took a reactionary "wait and see" role in determining what to do for those who remained and existed in a general state of uncertainty about the future. The next day of reporting confirmed the worst predictions with one-word headlines reading "CATASTROPHIC," and the first indication of a clear and present danger appeared as a part of the risk narrative in secondary themes of levee breaches threatening to inundate the city. The Hurricane Katrina risk narrative took shape as comparisons to past hurricanes allowed readers to understand the scope of the disaster and the general situational uncertainty.

Hurricane Katrina landed New Orleans a staggering blow on Monday, August 29, 2005, far surpassing the damage done by Hurricane Betsy, the landmark disaster of an earlier generation. Katrina flooded huge swaths of the city, as well as Slidell on the north shore of Lake Pontchartrain, in a process that appeared to be spreading even as night fell. A powerful storm surge pushed huge waves ahead of the hurricane, flooding much of St. Bernard Parish and the Lower Ninth Ward, just as Hurricane Betsy had done 40 years before; but this time the flooding was more extensive, spreading upriver and covering parts of the city's Bywater, Marigny, and Treme neighborhoods. As with Hurricane Betsy, people scrambled into their attics or atop their roofs, pleading for help from the few passers-by (Nolan 2005, A:1). The only certainty spread throughout the newspaper was, "We lost everything: cars, art, furniture, everything" (August 30, 2005, A:2).

While the facts and pictures began to emerge and become readily available in the news, the general uncertainty that characterized the narratives before the storm's landfall remained. Two days following the disaster, the headlines redefined the risks as being both of personal concern and social uncertainty. Everywhere people were homeless: Some wandered aimlessly; others massed at bridges and ferry landings, waiting for boats and buses no longer in service. When the first dozen buses finally arrived at the Superdome on Thursday to start transporting the estimated 23,000 refugees to Houston, shoving and fights broke out and trash cans were set ablaze as people jockeyed to get out of the fetid, stinking stadium—the city's shelter of last resort—in which they had been captive since entering four days earlier (Horne 2006, 4). Stories of the lawlessness and chaos in the city and the demand for more National Guard troops to curb the mass looting and personal property loss covered the news pages.

These general situational uncertainties also characterized the critical coverage period. As the narrative unfolded, citizens were presented with general situational uncertainty followed by social uncertainty. Evidence of the social uncertainty and the collapse of fundamental components of civil society highlighted this period. Reporters told stories of looting, gang rape, malicious acts of violence, and vigilante groups—all of which served to exemplify the disintegration of the social structure. Jed Horne's Pulitzer

Prize winning article, "Help Us Please," set the tone of the reporting on the civil disorder in New Orleans by stating, "Some of the violence and lawlessness appeared to be born as much of desperation as of mere jubilant greed that marked looting shortly after the stormed passed" (Horne 2005, A:4). Furthermore, imagery of chaos and civic disorder appeared throughout the risk narratives. Typical of such views is Jefferson Parish Emergency Operations Director Walter Maestri's comment: "I'm supposed to be cleaning up after the storm and I have the sheriff's deputies walking around on the roof with AK-47's and machine guns" (Horne 2005, A:4). The narratives only used images illustrating the detaining and arrest of African Americans to describe the widespread lawlessness. Many of these stories of unrest and a population totally run amok were later discredited by independent investigators.

Return Policy and Environmental Health

Calling Hurricane Katrina "our own tsunami," Centers for Disease Control (CDC) Director Julie Gerberding said the 24 teams comprised of 20 members each heading for the area would include experts in infectious diseases and environmental health. "We haven't seen a lot of diseases because the things that put people at risk are being in floodwaters and cleaning up after floodwater," she continued, adding, "Most evacuees haven't had a chance to go back home" (Pope 2005a, 3). By the 10th day of coverage, disease (environmental health) and environmental dangers became the primary components of the risk narrative, with headlines such as "Oil spills darken waters" and "Foundations of fishing industry obliterated." Both of these articles, in describing the ruination of the fisheries, marinas, wildlife, and towns and in raising clean water questions, characterized the environmental concerns.

Environmental concerns drove public policy decisions at the time regarding whether or not the city was safe to re-inhabit. *The Times Picayune* elected to print the headline, "Some part of Orleans could open on Monday: Decision will hinge on air and water toxicity test results" (September 14, 2005, A:1), thus shaping the ongoing Katrina saga by introducing the notion of decisions based on scientific tests and the likelihood of significant adverse health risks to the returning population. Environmental experts expressed concern that the Environmental Protection Agency's (EPA) testing was incomplete and that health hazards may persist long after the "all-clear" call for return was issued.

One month after Hurricane Katrina hit New Orleans, Hurricane Rita threatened to do the same and effectively undo all of the repairs that had been made to the city. The risk of repeating the Katrina scenario after Hurricane Rita was too real and many policymakers and civic leaders became proactive after the stories of community collapse, misery, and death began to fill *The Times Picayune*. While fears and risks associated with hurricane devastation continued, so did environmental pollution and environmental health (i.e., disease) concerns. And the fears were confirmed as the breach in the London Street Canal caused the inundation of the Lower Ninth Ward, Arabi, and Gentilly neighborhoods. As a result, New Orleans earned the dubious distinction of being a city of risk or a fully developed riskscape nicknamed the "Big Uneasy" from an editorial in the September 24, 2005, (B7) edition of *The Times Picayune*. The "Uneasy" nickname became synonymous with the risks associated with living in the city. The daily

experience became a riskscape filled with seen and unforeseen hazards and engineering flaws.

Constant environmental health reminders to returning citizens continued to be issued throughout the local newspapers during the initial impact period. In a *Times Picayune* article about the dangers of exposure to household mold called "The Same Old Same Mold," experts attempted to educate the public about this particular environmental health hazard:

> There are, however, health risks associated with toxigenic molds, and Sothern said he has found "massive levels" of stachybotrys in several local homes. The mold expert also is concerned, he said, by findings of trichoderma and fusarium, the latter of which looks like a spider web and is considered rare. 'I'm shocked at the amount of it I've seen,' said Sothen. He is awaiting further testing on several kinds of aspergillus to see if any are toxigenic.

> The multiple varieties of mold found in many homes [create] another problem. When different species fight for the same food sources – as has happened with Katrina – they produce higher levels of toxins. And killing the mold does not get rid of the toxins: while dead mold spores can no longer cause infectious diseases (which are rare anyway), they are just as potentially perilous if inhaled.

> 'The health hazard depends on the level of exposure and the sensitivity of the individual,' said Reichel. 'Some people can clean up with no effect. Others can come in contact with a tiny bit of mold and get sick.'

> Mold can be a trigger for asthma and allergies. If you're allergic to penicillin, you'll also be allergic to the 150 species of penicillin molds" (Peck 2005, A:1).

Several other environmental health concerns were also addressed. The second most common environmental health issues discussed during this period were puncture wounds and tetanus.[2]

Interestingly, three weeks prior to Hurricane Katrina, other experts, including former Xavier University toxicologist Marcus Iszard, had warned of long-term environmental risks residents might face upon re-entering the city should a major disaster take place. Iszard stressed that in the event of a major catastrophe, there was no clear evidence that there was a risk of harm to returning residents, but at the same time, there

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[2] For more information of health concerns see Atkins, David and Ernest M. Moy. 2005. Left Behind: the Legacy of Hurricane Katrina: Hurricane Katrina puts the Health Effects of Poverty and Race in Plain View. *British Medical Journal*. 331, 916-918.

was no evidence of zero risk either. For example, lead found in high concentrations in floodwater could become airborne after the water dried and left its sediments (Russell 2005, A:12). Because lead is highly toxic and produces a range of adverse health effects, it would be important to understand and contain citizen exposure to such hazards in older buildings. Many homes built before 1978 contain lead-based paint, which if disturbed or removed, could result in elevated concentrations of lead dust in the air.

Decision-Making, Public Policy, and Early Hurricane Narratives

When Hurricane Rita made landfall less than a month after Hurricane Katrina, risk of further devastation became the dominant theme of local newspaper coverage with the headlines like "Rattled by Rita" (Pope 2005b, A:1). All front page stories focused on an anticipation of another flood, the health and safety of returning evacuees, levee safety, and, of course, Hurricane Rita.

The most important headlines (e.g, "Katrinalike," "Ground Zero," etc.) from this time are those that allude to risk and utter disaster because they had the potential to shape public opinion and help focus policy decisions. The assessment of danger became the dominant theme among local officials. New Orleans Mayor Ray Nagin asserted, "We're learning as we go…We're a lot smarter this time. We understand what it takes to mobilize away from the threat of a Hurricane" (Pope 2005b, A:1). President George W. Bush praised Nagin's decision to stop people from returning to New Orleans in light of Rita's march across the Gulf and its threat to southeast Louisiana. "He [Nagin] made a wise decision to say to people, 'Be cautious about returning here,' because a rain of any amount could cause these levees to break again," said Bush, who attended a briefing on Rita with Louisiana Governor Kathleen Blanco, Nagin, and Joint Task Force Katrina Commander Lt. General Russel Honore aboard the USS Iwo Jima (Pope 2005b, A:1).

Evidence of the affects of the disaster's corrosive community impacts began to emerge as citizens' trust in local, state, and federal governments to effectively address the levee breaches and the crime problems wavered. According to Miller and Rivera (2006), , distrust of elected and public officials in post-Katrina New Orleans reached a critically low point when help did not arrive in a timely manner, and, more related to this study, when information gate keepers were found to have withheld vital knowledge. Many elected officials (e.g., Mayor Nagin, Governor Blanco, FEMA Head Michael Brown, Homeland Security Head Michael Chertoff, and President Bush) shared the blame, but none were so vilified as the Local Army Coup of Engineers and FEMA.

Implications and Conclusions

This research has focused on the qualitative analysis of risk narratives. Consequently, it emphasizes risk narrativization in the local media and how risk is situated in time, space (Tulloch and Lupton 2001), and on a continuum upon which public policies decisions are based. "Traditionally, the mass media have been both thanked and blamed for many of the perceptions and beliefs held by members of the general public" (Metha 1995; Miller et al. 2000, 27). One of the prevalent themes expressed during the immediate impact period of the hurricane news coverage is risk. In this series of articles, the word risk appeared at least once in every paper throughout the study period. "The need to understand how people in general, and in different subgroups, form their perceptions of risk is increasingly recognized as a separate field of research…

The discrepancies between, for example, model based risk estimates by experts and the public's perceptions is a problem which faces politicians, industrialists and technocrats all over the world" (Wåhlberg and Sjöberg 2000, 31). People who are not a part of the scientific community—the general public, legislators who establish public policy, etc.—are more likely to accept vivid narratives as they are presented in the newspaper, regardless of the scientific bases of the reported risk implications (Borthwick-Duffy et al. 1998). Because of the vivid health advisories the CDC issued concerning the possibility of contamination, puncture wounds, and animal bites, public officials issued local return advisories, allowed the community limited return to some areas, banned returns all together in others, and used the media to augment and further communicate the risk narrative.

This study used two main research questions (RQ) to examine risk narratives associated with environmental uncertainty and the local media's shaping of policy through its portrayals of risk:

For RQ$_1$ (*What characterizes the definition of environmental uncertainty and risks during the immediate impact phase and how does it change during the immediate impact period after the disaster?*), general situational uncertainty characterizes the risk narrative shortly before and after the hurricane's landfall. This general situational uncertainty is evident in the language used to communicate the predictions. Words such as "may cause," "can cause," or "has the potential to cause" clearly illustrate the lack of certainty when describing the effects of the wind, water, and safety risks as the risk narrative begins. No signs of the legal-moral aspects of uncertainty were coded. Signs of social uncertainty and uncertainties based on rights or interests were coded as residents began to return to the area and specific concerns emerged regarding the degree of trust in local, state, and national government officials and how flooded neighborhoods would rebound. Questions of "Who has the right to return?"; "Whose house will be bulldozed?"; and "What section of the city should return first?" translated into public policy decisions influenced by the risk narrative. These findings suggest a further need to examine the development of risk construction in the media.

For RQ$_2$ (*How are the policy decisions, namely for citizens to return home, informed by the risk narratives in the newspaper?*), the decisions made, based on a variety of inputs, support the contention that media narratives, namely newspaper accounts read by local citizens, are weighed by local decision-makers. Quarantelli (1991, 2) notes that "a strong case can be made that what the average citizen and officials expect about disasters, what they come to know on ongoing disasters, and what they have learned from disasters that have occurred, are primarily if not exclusively learned from mass media accounts." It is important to understand the precautionary perspective and how it relates to the risk narratives in the local newspaper. Proponents of a precautionary perspective would argue that, in crafting return policy, civic leaders should look at the possibility of returning citizens to the city in a holistic way; the interaction *between* different parts of the ecosystem should not be ignored. If experts cannot agree on the significance of the risks posed to those returning, then the repopulation of New Orleans should not proceed (See Hannigan 1995, 80-81; Raffernsperger and Tickner 1999; Miller et al. 1999; Morris 2000). Evidence of how the precautionary perspective impacts local risk narratives appears on the first page of a *Washington Post* issue anticipating

Hurricane Rita's approach, in the article "Storm Threat Halts Returns To New Orleans: Mayor Orders Wednesday Evacuation":

> With Tropical Storm Rita bearing down on the Gulf of Mexico and growing political pressure from federal leaders, Mayor C. Ray Nagin said Monday that New Orleans residents could not return home after all and that any people already in the city should evacuate.
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> Nagin had been allowing business owners to return over the weekend, and on Monday residents of one dry neighborhood were to return to their homes. But Nagin reversed himself and ordered another mandatory evacuation, to begin Wednesday; just hours after President Bush questioned whether the city was safe enough for people to return. (Connolly 2005, A:01).

Continuing to take a precautionary perspective, Nagin added, "If we are off, I'd rather err on the side of conservatism to make sure we have everyone out" (Connolly 2005, A:01).

The role of risk as floodwaters and toxins entered the region equated to the manifestation of ambiguity surrounding the phenomenon and a failure of actors and institutions in the complex social system to maintain normalcy. Problems abounded throughout the social system in the form of government inactivity or simple failure to react as demonstrated by the absence of an immediate response from the Bush Administration, failures of contingency plans established to facilitate recovery, and a lack of competent personnel.

An important aspect of this study is its future implications for the social scientific understanding of the mass media's role, specifically newspapers, in the social construction of risk and its influences on public policy decisions after disasters. Although this study focused on local narratives, it offers insight into the kind of information officials used to reach conclusions about risks in their environment immediately before, during, and after disaster, but it is not without limitations. To view local print news as the prime source of information would oversimplify the nature of the study and the complex process decision-makers undertake when they are responsible for the public's well-being. As the SARF suggests (see Kasperson et al. 1988), there are a multitude of socio-political, legal, ethical and psychological factors weighing into the decision to return, warranting further study into the role the local newsprint media plays in relation to these simultaneous variables. The early Katrina risk narratives can act as a qualitative variable to help analyze how public policy is formed and enable the understanding of some citizen frustrations as information evolves immediately after a disaster when primary data is scarce and communication structures are disabled. Typically, disasters occasion mutual frustrations. According to Krimsky and Plough (1988, 280-281), "[g]overnment officials resent the public's resistance to seeing things their way; in the minds of officials, this resistance is their risk communication 'problem.' [Meanwhile] [c]itizens resent government officials. Insistence on an abstract, rational-analytical approach, which rests on what they perceive as arbitrary assumption, is hedged with uncertainties, and fails to take [into] account local residents' experiences and history of exposure to a specific site

under specific circumstances; in the minds of citizens, the theoretical approach applied by the government agencies is their risk communication 'problem'."

Thus, "[h]ow communities and local media frame the issues has a direct impact on how citizens [and policy makers] become aware of issues, form attitudes, and ultimately decide to act or react to a situation" (Durfee 2006, 489). Tulloch and Lupton (2001, 22) remind us that "[i]n all cases…the public's memory of risk is not short term. It is woven into an ongoing biographical project in relations to risk perception and management." By understanding the role risk narratives play in defining and shaping political environments, we can better understand how risks in the media can influence public policy decisions.

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