Hurricane Katrina: a content analysis of media framing, attribute agenda setting, and tone of government response

Brigette Lynn Brunken
Louisiana State University and Agricultural and Mechanical College, bbrunk1@lsu.edu

Follow this and additional works at: https://digitalcommons.lsu.edu/gradschool_theses
Part of the Mass Communication Commons

Recommended Citation
https://digitalcommons.lsu.edu/gradschool_theses/1502
HURRICANE KATRINA: A CONTENT ANALYSIS OF MEDIA FRAMING, ATTRIBUTE AGENDA SETTING, AND TONE OF GOVERNMENT RESPONSE

A Thesis

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Master of Mass Communication

in

The Manship School of Mass Communication

by

Brigette Lynn Brunken
B.A., Louisiana State University, 2004
August 2006
To Dr. Kaye D. Trammell.

I’ll miss our ridiculously early Monday meetings and peanut butter cookies.

Thank you for your time and patience, and for teaching me how to kick ass.

I learned from the best, even if you are a Gator.
Table of Contents

ACKNOWLEDGEMENT.................................................................ii

ABSTRACT.............................................................................................v

CHAPTER
  1 INTRODUCTION..................................................................................1
    Purpose..................................................................................................5
    Rationale..............................................................................................5
  2 LITERATURE REVIEW.............................................................................7
    Framing..................................................................................................8
    Attribute Agenda-Setting......................................................................20
    Tone......................................................................................................23
  3 METHOD...............................................................................................28
    Frames..................................................................................................29
    Issue Attributes...................................................................................32
    Tone......................................................................................................34
  4 RESULTS..............................................................................................38
    Frame Factors......................................................................................38
    Media’s Use of Frames......................................................................41
    Week-to-Week Framing Differences....................................................43
    Issue Attribute Indices.......................................................................45
    Media’s Use of Issue Attributes..........................................................45
    Week-to-Week Issue Attribute Differences........................................48
    Media’s Use of Tone............................................................................51
    Media’s Use of Tone between Elite and Local Media..........................52
    Week-to-Week Tone Differences........................................................53
  5 DISCUSSION..........................................................................................55
    Media’s Use of Frames......................................................................55
    Week-to-Week Framing Differences....................................................57
    Media’s Use of Issue Attributes..........................................................63
    Week-to-Week Issue Attribute Differences........................................67
    Media’s Use of Tone............................................................................72
    Week-to-Week Tone Differences........................................................75
  6 CONCLUSION.....................................................................................77
    Limitations...........................................................................................78
    Future Research..................................................................................79

REFERENCES.......................................................................................81
Abstract

This study content analyzed print media coverage of government response from four newspapers in the five weeks immediately after Hurricane Katrina, looking for common frames, attribute agenda setting, and tone. In addition, it assessed week-to-week differences throughout coverage. Findings indicate that the order of Semetko and Valkenburg’s (2000) common frames changed, emphasizing human interest first. Conflict, attribution of responsibility, economic consequences, and morality frames followed. Media’s use of attribute agenda setting was evident throughout coverage, primarily emphasizing the issues, relief and rescue, economic, negative timeliness, and rebuilding and repairing. Media’s tone of government response was moderately neutral with federal tone covered more positively, and local tone covered more negatively. Frames and issue attribute varied throughout coverage, however, tone did not. This study recognized media’s use of framing, attribute agenda setting, and tone, thereby offering a better understanding of how print media portray government response during a natural disaster.
Chapter 1 Introduction

American media have the power to educate, raise awareness, and shape public attitude (Bullock, Wyche & Williams, 2001). They are responsible for providing timely, fair, and balanced news and information of world events, which allow the public to make well-informed and educated decisions. However, “all the reporters in the world working all the hours of the day could not witness all the happenings in the world” (Lippmann, 1922, p. 183). Limitations such as distance, time constraints, and subjectivity challenge the media. After they select news content, they emphasize, exclude, and elaborate the content to include in the media agenda (Hester & Gibson, 2003). While it is impossible to recover all truth to every newsworthy issue or event, understanding the framing of news, the attributes used to describe that issue, and the tone in which they are disseminated allow the public to form their own opinions and make their own decisions. This study will examine such frames and issue attributes from a different perspective: crisis news coverage of a natural disaster.

Immediately after Hurricane Katrina devastated New Orleans, Louisiana, federal, state, and local government officials faced a major crisis. While it is impossible to predict an exact crisis, measures should be taken to make an organization as prepared as it can be. Crisis preparedness involves a crisis communications plan for possible situations, an ongoing media evaluation to monitor media coverage, a crisis management team, including public relations practitioners ready to investigate and report to media, and a spokesperson. Martin and Boynton (2005) suggest that proper crisis communication may lead to more positive media coverage.
Research shows that “disaster news influences public perceptions and concerns. After every natural disaster, sources try to frame the news” (Salwen, 1995, p. 827). When a natural disaster demolishes a community, it severely impacts members in that community (Salwen, 1995). As such, these events allow researchers to assess the degree to which media select news and shape its content in the midst of a fast-paced story and crisis.

Framing theory is a key component in the study of selection and interpretation of news. Framing affects how a story is told and influences public perception (Bullock, 2001). To grasp a better understanding of effects of frames, Cappella and Jamieson (1997) argue that frames must have identifiable conceptual and linguistic characteristics and be commonly observed in journalistic practice. Therefore, news content analysis is essential to studying the effects of news. Frames are powerful, but typically unnoticed devices affecting the public’s judgments of responsibility and causality (Bullock, 2001). The public’s lack of awareness, along with their reliance on media for information and decision-making, make them more likely to be influenced by framing (Auerbach & Bloch-Elkon, 2005; D’Angelo, 2002). Given the reliance on media during times of crisis, framing of a natural disaster story can carry great influence.

Media framing influences public opinion. In their content analysis of framing European politics, Semetko and Valkenburg (2000) suggest that framing may affect respondents’ perceptions of risk, or political issues or institutions. This study uses Semetko and Valkenburg’s (2000) five common frames in a crisis setting to see whether the order of the frames will match or differ from previous research.
Another component of media influence is agenda setting theory, which involves the transmission of object salience (McCombs, Llamas, Lopez-Escobar, & Rey, 1997). Issues prominent to the media picture become prominent to the audience picture (McCombs et al., 1997). The agenda setting theory revived Lippmann’s (1922) concept that the media shape the pictures in our heads (Takeshita, 1997). McCombs and Shaw (1972) found that to some degree, the media agenda determines the audience agenda. Therefore, “Determining what to select for attention and what to ignore among a number of existing issues mean determining the perspective you apply to view the political world as a whole” (Takeshita, 1997, p. 20).

Stemming from the idea that the media tell us what to think about, second level agenda setting suggests that the media tell us how to think about some objects (Golan & Wanta, 2001). This second level, also called attribute agenda setting, broadens original agenda setting thereby strengthening the theory altogether (McCombs et al., 1997). Kim, Scheufele, and Shanahan’s (2002) research of media coverage of a local issue found that “by covering certain aspects of the issue more prominently, the media increased the salience of those aspects among audience members” (Hester & Gibson, 2003, p. 75). In addition, King’s (1997) findings from voters’ descriptions of mayoral candidates indicated that, “the attributes of candidate image emphasized in the news were significantly correlated with voters’ agenda of image attributes” (Hester & Gibson, 2003, p. 75).

Many researchers have elaborated on the similarities between framing and attribute agenda setting. Indeed, some contend that framing is a function of agenda setting, while others argue for their separation. De Vreese et al. (2001) provides a
clarification, separating frames into issue-specific news frames and generic news frames. Issue specific frames include specific topics or news events, whereas generic frames apply to a broad range of news topics (de Vreese et al., 2001). This study examines several issue attributes surrounding coverage throughout Hurricane Katrina to investigate print media’s framing of specific issues in greater detail, and to find out which issues received more or less salience from print media. Some topics are discussed in more detail than others are, which may leave an understanding by audience members that certain news is more significant than other news. Building on de Vreese et al.’s research, this investigation captures particular aspects of “selection, organization, and elaboration that are present in news coverage and pertain specifically to a well-defined issue” (p. 108).

In addition to examining framing theory and issue attributes, this study assesses print media’s use of tone in its coverage and description of government officials throughout a natural disaster. Hester and Gibson’s (2003) research on the media’s second level agenda-setting of economics and its influence on public opinion, shows that the media have a larger impact on public opinion during bad economic times rather than pleasant ones. In this case, one might assume that the media’s role after a natural disaster like Hurricane Katrina has a larger impact on developing negative public opinion of levels of government more so than during pleasant times.

The tone media use to disseminate news tells the audience not just news, but also the opinion of a particular reporter. Tone, or valence, is one more part of media framing and agenda setting that influences audience members to think a certain way about a particular issue. A thorough investigation of print media’s use of tone provides
researchers with an additional influential mechanism that media use to shape public opinion.

**Purpose**

The purpose of this study is to investigate print media’s use of framing and attribute agenda setting of three levels of government throughout coverage of a natural disaster. This work builds on Semetko and Valkenburg’s (2000) analysis of frames, investigating their common frames in this crisis setting. Similarly, it examines media use of attribute agenda-setting during a natural disaster, thus providing better insight into media’s influence on news content. Finally, this study analyzes the tone print media use through the stories’ description and wording to shape opinion of levels of government.

**Rationale**

When the media place stories in specific frames, they lend a different meaning to the news (Auerbach & Bloch-Elkon, 2005). The media increase or decrease the salience of issues, which allows the public to remember and make judgments on such issues. Framing assumes that “subtle changes in the wording of the description of a situation might affect how audience members think about the situation” (Hester & Gibson, 2003, p. 74). Attributes or second-level agenda setting, “suggests that media coverage influences how we think, or frame, the issues we are thinking about” (Craft & Wanta, 2004, p. 456). Attribute agenda-setting involves media’s coverage of attributes of an issue.

During a crisis, the mass media are the only institutions that can collect this massive amount of information and disseminate it quickly (Graber, 1984). In addition, the public expects the media to interpret the situation, guide behavior, and even mobilize
relief efforts (Graber, 1984). Media framing and attribute agenda setting shape reality, thereby affecting public opinion. Researchers’ findings of such media uses allows for the realization that media have agendas, which influence the public’s perceptions of reality.

This study is important because it offers significant findings that help to explain the ways in which media shape news. Particularly in the case of a natural disaster, when the public is more likely to look to the media for answers, it is not uncommon for crisis news to lose some objectivity. It may become easier and more entertaining to criticize government officials, and elaborate on unusually intense stories rather than to focus on balanced news. This analysis of media’s uses of some of these tools, including frames, issue attributes, and tone provide a better understanding of how the media deliver crisis news.

This study will content analyze frames, issue attributes, and tone of print media throughout coverage of Hurricane Katrina. The rationale behind analyzing print media coverage allows researchers to recognize the influence that media framing, issues contributing to attribute agenda setting, and media’s use of tone have on shaping public opinion. Such research is necessary in broadening and contributing to the understanding of agenda setting theory and its influential elements like framing, topics adding to attribute agenda setting, and tone during a crisis. In addition, Semetko and Valkenburg’s (2000) predefined frames are used to assess the prevalence of frames in a crisis setting. Topics are examined as attributes of agenda setting. Tone, which is assessed from descriptions and particular wording, further establishes media’s power to shape news and influence public opinion. Determining an elaborate understanding of media’s influential elements expands upon the discussed theories.
Chapter 2 Literature Review

This study examines specific elements of media agenda setting including framing, issue attributes, and tone used in framing government officials. First, this study uses Semetko and Valkenburg’s (2000) suggested five frames to determine media reliance on these frames. Semetko and Valkenburg’s (2000) research involving national news coverage found that the media’s most common frames, in order of predominance were attribution of responsibility, conflict, economic consequences, human interest and morality (Semetko & Valkenburg, 2000). However, such findings may not be consistent in the case of a natural disaster.

In addition to frames, this study examines topics as contributors of a second level of agenda setting. Research shows that “disaster news influences public perceptions and concerns” (Salwen, 1995, p. 827). This study’s examination of coverage of Hurricane Katrina allows for an in-depth investigation into the attributes, or topics, of the hurricane. The attributes examined here include relief or rescue efforts, rebuilding or repairing efforts, promises made by government officials, positive and negative timeliness, economic issues, health concerns, and crime.

Finally, the tone used in print media’s delivery of information is examined to assess the slant of print news coverage of particular levels of government. Salwen (1995) argues that criticism of government officials occurs more often during a crisis. When an event like Hurricane Katrina occurs, the media use it as an opportunity to analyze and criticize the character of elected public officials and manipulate stories and situations, thereby drawing attention to government crisis and response (Salwen, 1995). Therefore, the media use tone as another element of agenda setting.
Framing and attribute agenda setting expand beyond and build upon agenda setting theory (Ghanem, 1997; Semetko & Valkenburg, 2000). Moreover, the uses of topic and tone feed upon framing and attribute agenda setting. While some researchers differ in opinion with regard to differences between framing and attribute agenda setting, here, the two are investigated separately, with distinguishing definitions provided by de Vreese et al., (2001), Scheufele (2000), and Ghanem (1997). The literature reviewed here focuses on framing, attribute agenda setting, and tone.

**Framing**

Walter Lippmann (1922) explains that public opinion is based upon the pictures inside people’s heads, which come from media’s framed reality of events in the world. Studies on framing theory date back as early as the 1940s, as a paradigm for understanding and investigating communication and related behavior in such disciplines as psychology, speech communication, organizational decision making, economics, health communication, media studies, and political communication (Hallahan, 1999, p. 205).

Baysha and Hallahan (2004) divide framing into four stages. The first stage, during the 1920s and 1930s, was established from research on “World War I propaganda effects and beliefs about the media’s influence on people’s attitudes” (Scheufele, 1999, p. 107). From the 1930s to the 1960s, or the second stage of framing, media researchers examined the importance of personal experience in attitude change because they believed that media’s major affect was “the reinforcement of existing attitudes” (Baysha & Hallahan, 2004, p. 234).
Research throughout the 1970s and 1980s, or the third stage, focused on cognitive effects, which state that prior knowledge of an issue is believed to “mediate the power of frames in a decision-making or evaluative context” (McLeod & Detenber, 1999, p. 7). Callaghan and Schnell (2005) add, “It wasn’t until the 1980s that empirical works on ‘framing effects’ emerged” (p. 2). G. E. Lang and K. Lang (1983) studied the relationship between the media and public opinion during the Watergate crisis and suggested the use of frames in the concept of agenda building, a collective process in which the media, government, and the public influence each other in determining what issues are relevant (Severin & Tankard, 2001). The particular step suggested, “The events and activities in the focus of attention must be framed, or given a field of meanings within which they can be understood” (p. 230). The agenda-building concept suggests that how the media frame an issue and the code words they use to describe it can affect the message.

The fourth stage, including the 1980s to the present, is dominated by social constructivism, which “explains the relationship between media and audiences by combining elements of both strong and limited effects of mass media. Goffman (1974) assumes that individuals cannot fully understand the world, and therefore, classify and interpret their experiences to make sense of it (Scheufele, 2000). The information they receive comes from influencers that set an agenda of reality—the media. D’Angelo (2002) said constructionists believe that although a news frame pervades coverage, it still contains a useful range of information in the understanding of political issues. The public learns about most events from the media, therefore, they depend on the media for their point of view (Callaghan & Schnell, 2005, p. 15). They interpret and situate social
phenomena within a context that creates meaning to life experiences (Snow, Burke Rochford, Worden & Benford, 1986).

Hallahan (2000) uses a framing metaphor to interpret the frame as a “window or portrait frame drawn around information that delimits the subject matter and, thus, focuses attention on key elements within” (p. 207). Framing plays an integral role in the study of communication. For a more productive application to research, Hallahan developed seven models of framing involving situations, attributes, choices, actions, issues, responsibility, and news. The final model, news framing, is relevant to this research, as it is “an approach to understanding news processes and effects” (p. 221).

Tuchman (1977) was the first to recognize the vital role that framing plays in the media’s news gathering and audience members’ news processing, suggesting that “media use frames to construct social reality for audiences and thus give meaning to words and images” (Hallahan, 2000, p. 222).

Researchers offer several related, yet separate definitions of framing (Callaghan & Schnell, 2001; Entman, 1993; Gamson & Modigliani, 1987; Ghanem, 1997; Iyengar, 1991; Semetko & Valkenburg, 2000; Tankard, Hendrickson, Silberman, Bliss & Ghanem, 1991; Tuchman, 1977). Entman (1993) suggests that most framing research develops from inconsistent meanings, which result in a fractured paradigm. But D’Angelo (2002) disagrees, arguing that “knowledge grows when theories anticipate, and even generate, apparent refutation” (p. 872). In other words, several definitions of framing contribute to the theory, rather than take away from it.

Broadly, framing refers to “the process through which individuals or groups make sense of their external environment” (Boettcher, 2004, p. 332). To distinguish framing
from other related theories, this study uses Scheufele’s (2000) work to define framing as
the subtle changes in the wording of the description of a situation, which might affect
how audience members interpret the situation. He adds, “Framing influences how
audiences think about issues, not by making the issue more salient, but by invoking
interpretive schemas that influence the interpretation of incoming information”
(Scheufele, 2000, p. 1530). However, Entman (1993) suggests that framing involves
selection and salience, recognizing “to frame is to select some aspects of a perceived
reality and make them more salient in a communicating text, in such a way as to promote
a particular problem definition, causal interpretation, moral evaluation, and/or treatment
recommendation for the item described” (p. 52). Frames define problems, identify causes
to the problems, make judgments by evaluating agents and their effects, and suggest
remedies by offering treatments for those problems and predicting possible effects.

Entman (1993) argues that frames have at least four locations in the
communication process: the communicator, the text, the receiver, and the culture. First,
communicators consciously or unconsciously make frame-guided judgments that
organize their belief systems. In other words, the first location involves the content of
frames and their joining together of “textual items (words and images) with the
contextual treatment that they receive from framing devices” (D’Angelo, 2002, p. 873).
Pan and Kosicki (1993) add that frames are therefore considered to be ontologically
separate from the topic.

The second location, the text, contains frames, “which are manifested by the
presence or absence of certain key words, stock phrases, stereotyped images, sources of
information, and sentences that provide thematically reinforcing clusters of facts or

11
judgments” (Entman, 1993, p. 52). D’Angelo (2002) adds that frames shape levels of reality. They are “powerful discursive cues that can impact cognition (e.g., Rhee, 1997), individual socialization via interpersonal discussions (Gamson, 1992), public opinion formation (Entman, 1991), and group use of media messages to achieve their goals (Gitlin, 1980). As such, “the concept of framing consistently offers a way to describe the power of a communicating text” (Entman, 1993, p. 51).

Kinder and Sanders (1990) suggest, in the third location, that frames lead a double life as “internal structures of the mind” and “devices embedded in political discourse” (p. 74). Individuals, or receivers, use frames as prior knowledge to efficiently process information. These processed frames are part of the commonly invoked frames of a larger culture, the fourth location. The culture is the supply of commonly used frames displayed in social discourse and thinking. Thus, “framing in all four locations includes similar functions: selection and highlighting, and use of the highlighted elements to construct an argument about problems and their causation, evaluation, and/or solution” (Entman, 1993, p. 53).

Salience is elevated when frames highlight pieces of information over others about particular items in communication. Fiske and Taylor (1991) suggest, “an increase in salience enhances the probability that receivers will perceive the information, discern meaning and thus process it, and store it in memory (Entman, 1993, p. 53). Kahneman and Tversky (1984) offer an example of the power of framing and how it operates by “selecting and highlighting some features of reality while omitting others” (Entman, 1993, p. 53). The authors asked subjects the following:

“Imagine that the U.S. is preparing for the outbreak of an unusual Asian disease, which is expected to kill 600 people. Two alternative programs to combat the
disease have been proposed. Assume that the exact scientific estimates of the consequences of the programs are as follows: If Program A is adopted, 200 people will be saved. If Program B is adopted, there is a one-third probability that 600 people will be saved. Which of the two programs would you favor?” (Kahneman & Tversky, 1984, p. 343).

Results showed that 72 percent of subjects chose Program A, and 28 percent chose Program B. Salovey, Schneider, and Apanovitch (2002) argue, “when losses are anticipated, people no longer prefer the option that is a sure bet. Rather, they choose the option that involves some uncertainty or risk” (p. 393). This example illustrates how “the frame determines whether most people notice and how they understand and remember a problem, as well as how they evaluate and choose to act upon it” (Entman, 1993, p. 54). As such, the frame has a “common effect on large portions of the receiving audience, though it is not likely to have a universal effect on all” (Entman, 1993, p. 54). Khaneman and Tversky’s findings (1984) demonstrate how frames select and call attention to particular aspects of reality, and simultaneously direct attention away from other aspects.

In an attempt to broaden its meaning, Tankard, Silberman, Bliss, and Ghanem (1991) define frames as central organizing ideas for news content that supply a context and suggest what the issue is through the use of selection, emphasis, exclusion and elaboration (Segvic, 2005). Researchers offer variations to the definition of framing in an effort to further and develop the theory. While these variations of an exact definition may cause discrepancies, it is universally understood that the result is the same. Framing influences public opinion.

While media use many frames to shape public opinion, Semetko and Valkenburg (2000) choose five commonly used news frames, which include conflict, human interest, economic, morality, and responsibility. In doing so, Semetko and Valkenburg (2000)
have taken deductive measures to determine the dominance of these particular frames. In order from most to least dominant, Semetko and Valkenburg’s (2000) findings show that the responsibility frame was most frequently used, followed by the conflict frame. Economic consequence, human interest, and morality frames were recognized, but used less often in international news stories (Semetko & Valkenburg, 2000). Media’s use of these frames package meaning into organized ideas, allowing the media to shape the way they tell the story.

It is important to mention Iyengar’s (1991) research regarding episodic and thematic frames here. Iyengar (1991) argued that news about political issues takes either an episodic or thematic frame. Iyengar (1991) stated, “The episodic news frame focuses on specific events or particular cases, while the thematic news frame places political issues and events in some general context. In other words, an event like Hurricane Katrina is not a general news event. The extraordinary circumstances involved, like massive flooding and a large death toll, make it a specific news event. Such an event may result in episodic framing affecting the selection of news items, and even the public’s attribution of responsibility for political issues. This study covered only five weeks of Hurricane Katrina, however, the devastation to the city of New Orleans and surrounding areas is significant and long-term. As such, it is suggested that future coverage will replace episodic news frames with thematic news frames as the rebuilding and repairing process continues. However, the longevity of the rebuilding process does not make news frames thematic. Thematic news frames develop from quality news stories that include a wealth of information about relevant and newsworthy events.
Li and Izard (2003) found that “In general, studies have shown that stories are framed differently on the issues covered and that the media are similar in the principal issues presented” (p. 206). The competitiveness and different intentions of newspapers might lead to different coverage patterns of Hurricane Katrina’s aftermath and framing of that coverage, offering a good opportunity to deal with the question of whether the magnitude of the devastation and work patterns significantly impact coverage of framing (Li & Izard, 2003).

In addition, the disaster opens a door to government criticism. Callaghan and Schnell (2005) suggest that framing has long affected politics and public opinion in the United States. The current study’s use of Semetko and Valkenburg’s (2000) five frames provides a thorough representation of popular and influential frames. Expanding upon their study, this content analysis shows which frames are most prevalent among print media covering a natural disaster. With this in mind, based on the literature review, the following question about framing is posited:

RQ1: How do the media frame the government’s response during a natural disaster?

In addition to examining frames in crisis, this study analyzes print media frames over a period of five weeks to find whether frames changed over time. Baysha and Hallahan (2004) researched media framing of the Ukrainian political crisis, and found that coverage did, in fact, change over time. They noted that different frames dominated in media coverage of the crisis at different periods of time, thus forming patterns of prominence among the frames. Based on the literature review, the following question is addressed:
RQ2: Will the order of the common frames vary throughout disaster coverage?

As an extension of agenda setting, framing theory must be distinguished by thoroughly investigating the parts that make it up. Ghanem (1997) breaks down frames into four dimensions: topic, presentation, affective attributes, and cognitive attributes. Attributes are subtopics of the object or issue being presented (Ghanem, 1997). For example, to examine the media’s agenda setting throughout coverage of Hurricane Katrina, researchers might consider the events or subtopics involved within the disaster, like relief or rescue efforts, rebuilding or repairing attempts, timeliness, promises made by government officials, economic issues, health concerns, or crime. Topics, like frames, create issue salience in news reporting (Ghanem, 1997). This dimension is discussed further in relation to attribute agenda setting.

While not examined here, placement and size are influential elements of framing. The way in which topics are presented, including placement of an article in a newspaper and size of the article, influences opinion of the topic being discussed (Ghanem, 1997). For example, a 2000-word article about New Orleans’ tourism and economic concerns that appears on the front page of the *Times Picayune* might bring attention to such issues as the future of the economy and tourism and industry. But a 200-word article about Governor Blanco promising to rebuild placed on the second to last page of the newspaper might have less of an influence simply because of placement and size. In this case, it is possible that economic concerns will seem more relevant than government promises.

A third dimension to framing is affective, which involves the public’s emotional response that may result from media coverage (Ghanem, 1997). Schudson (1982) argued “The power of the media lies in the forms in which declarations appear” (Ghanem, 1997,
Therefore, as storytellers the media have the power to order news using the inverted pyramid style, thereby engaging the public sooner and extending their interest. Print media displayed personal stories, locally and nationally, of family members literally washed away by storm surges and killed by rising water. As such, “bringing a story to such a personal level might help the reader identify with the happenings in the story and thus make the reader feel more concern for what is going on” (Ghanem, 1997, p. 13).

White (1950) developed seven news values to structure and organize news content in an effort to provide quality information that is both relevant and important to the reader: impact, timeliness, prominence, proximity, bizarre, conflict, and currency (White, 1950; Livingston & Bennett, 2003). Ghanem (1997) refers to two news values (proximity and human interest) in her framing research of affective attribution. She mentions Price and Tewksbury’s (1995) argument that “news values help determine which angles to take in writing the news and which details to emphasize” (Ghanem, 1997, p. 12).

White (1950) found that editors are personally subjective when deciding what is news. Pool and Shulman (1959) suggested that a reporter’s predispositions and stereotypes influence the tone in which information is disseminated, along with editors’ selection and assignment of news stories. Since White’s (1950) study, further gatekeeping studies by researchers such as Gieber (1964), Gans (1974), Tuchman (1972), and Hirsch (1977) suggest that “occupational, craft, and organizational norms concerning news and story categories explain more of the variance in news selection that personal bias” (Hirsch, 1977, p. 23). Hirsch (1977) reinterpreted White’s data suggesting that, “mass media professionals do not work in isolation, but must meet the expectations of
their organizations, occupation, and (to a less obvious extent) ultimate audience” (p. 21). Tuchman (1977) suggested that media professionalism—a method of controlling work—involved mastering techniques of writing appropriate news stories. As such, when grouped with Hirsch’s (1977) and others’ research, one might assess that White’s (1950) news values are a professional attempt to incorporate both unbiased and organized news to the reader.

Goffman (1974) defines a frame as a “schemata of interpretation that provides a context for understanding information and enables us to locate, perceive, identify and label” (Hallahan, 1999, p. 211). Frames activate these schemata, enabling them to “direct how an individual recognizes and uses framed information” (D’Angelo, 2002, p. 875). A final dimension of framing is cognitive attributes, or the details of attributes in a frame (Ghanem, 1997). This may answer whether the media and the audience are thinking of a problem in the same way, as cognitive attributes involve media-provided information of individuals and issues (Ghanem, 1997; Hester & Gibson, 2003). For example, by associating a candidate with a particular issue, it is assumed that members that receive such information will relate a specific candidate with that issue. Reality is constructed by attributes of causes and solutions (Rucinski, 1992). Ghanem’s (1997) dimensions of framing provide a thorough assessment of the theory, and describe other elements that play important roles in the framing process. Such description provides a richer and more refined understanding of communication and media’s use for it.

Media’s use of framing can affect the processing of a public’s understanding of information, how issues are discussed, and how the public form political assessments (Reese, Gandy, & Grant, 1991). By promoting a particular frame, they can alter
perceptions of an issue and swing public opinion (Callaghan & Schnell, 2001). The media, by selectively choosing to cover one or both sides of an issue, interpret, simplify and/or allocate greater coverage to one issue or another, thereby acting as gatekeepers, advocates and interpreters of information (Callaghan & Schnell). Reese (2001) describes framing as an “ideological contest over not only the scope of an issue, but also over matters such as who is responsible and who is affected, which ideological principles or enduring values are relevant, and where the issue should be addressed” (p. 40).

Researchers state that, “Ideally, the media are expected to serve as political watchdogs or guardians of the public interest who champion truth, pluralism, objectivity, balance and accuracy” (Callaghan & Schnell, 2001, p. 186). Changes in technology and journalism as a profession, however, have transformed the media’s direction (Callaghan & Schnell 2001; DeFleur, 1989). News is packaged, exploited, sensationalized, and dramatized, “thereby downplaying the larger, social and political picture” (Callaghan & Schnell 2001, p. 186). DeFleur (1989) further suggests that the media are blamed for “(1) lowering the public’s cultural tastes, (2) increasing rates of delinquency, (3) contributing to general moral deterioration, (4) lulling the masses into political superficiality, and (5) suppressing creativity” (p. 27). However, during crises, the public depends largely upon the media to report vital and accurate news and information. The mass media are responsible for collecting and disseminating information to stakeholders (Graber, 1984). Media focused research points out that media can actively influence definitions of social problems and legitimate understood positions on controversial issues (Faupel, Conner & Griffin, 1991). As media frame coverage of news, their power as influencers of public opinion continues to be explored and researched.
As Ghanem’s (1997) four dimensions break down framing theory, it is important to recognize that framing theory is one element in the bigger picture of agenda setting theory. Thus, another expansion worth mentioning is agenda setting at a second level. Agenda setting is wide in scope, yet parsimonious at the same time. Such research and description are necessary to bring more credibility to the influential theory.

**Attribute Agenda-Setting**

In his definition of agenda setting, Cohen (1963) argues that the media “may not be successful much of the time in telling people what to think, but is stunningly successful in telling its readers what to think about” (Lopez-Escobar, Llamas, McCombs, & Rey, 1998). Generally, “agenda setting means the transference of salience from the media to the audience members” (Takeshita, 1997, p. 20). Takeshita (1997) defines the agenda as “objects accorded saliency in the media content or in people’s consciousness” (p. 20).

In a review of agenda setting research, McCombs and Shaw (1993) suggest that Cohen’s argument “has been turned inside out. New research suggests that the media not only tell us what to think about, but also how to think about it, and, consequently, what to think” (p. 65). This new research includes attribute-agenda setting and framing.

Attribute agenda setting, also referred to as second level agenda setting, suggests a more subtle form of media effect than agenda setting, focusing “not on coverage of objects, but on how the media cover attributes of those objects” (Craft & Wanta, 2003, p. 456). Attributes are “the set of perspectives or frames that journalists and the public employ to think about each object” (Ghanem, 1997). Attribute agenda setting is a second dimension of agenda setting. While traditional agenda setting research mainly involved
amount of news coverage, attribute agenda setting research examines the tone of news coverage (Hester & Gibson, 2003). Second level agenda setting hypothesizes that “both the selection of topics for attention and the selection of attributes for thinking about these topics play powerful agenda-setting roles” (Hester & Gibson, 2003, p. 74).

Hester and Gibson’s (2003) research of attribute agenda setting and its effects on the economy suggest that the media do somewhat influence public opinion, that affective attributes of negative news coverage in their research, led to lower public evaluations of future economic situations (Hester & Gibson, 2003). McCombs, Llamas, Lopez-Escobar, & Rey (1997) suggest that this expanded aspect of agenda setting gives an even more powerful role to media in the political process. Attributes, otherwise known as subtopics (Ghanem, 1997) or subissues (Takeshita, 1997), were found to be influential in Takeshita and Mikami’s (1995) research of first and second level agenda setting in the 1993 general election in Japan. Their findings suggest “an agenda setting effect working at the subissue level of the main campaign issue” (p. 22).

Other studies illustrating the influence of second level agenda setting include Weaver, Graber, McCombs, and Eyal’s panel study of the 1976 U.S. presidential election, and Benton and Frazier’s (1976) analysis of the economy as a major recurring issue. Weaver et al. (1981) found strong correspondence of attributes between the Chicago Tribune and Illinois voters’ descriptions of the candidates, as did Benton and Frazier in their newspaper analysis. Another study, outside of elections and campaigns found that “public concern among Texans about crime over a three-year period was strongly linked (Spearman’s rho = .70) to the pattern of news coverage in the state’s major newspapers” (McCombs et al., 1997). Findings also showed “evidence that specific
frames in the crime coverage prompted public concern about crime” (McCombs et al., 1997, p. 706).

Attribute agenda setting occurs when media use topics or attributes of an issue or event to deliver news. Topics and attributes may be considered one in the same, as both act as pieces and parts that contribute to understanding an event or issue in its entirety. Golan and Wanta’s (2001) research of the perceptions of candidates in the 2000 New Hampshire presidential primary found that the agenda of attributes mentioned in newspaper reports—which candidate would be better at getting things done, which had a vision, which was more trustworthy, and which would cut taxes—influenced the agenda of attributes that New Hampshire voters linked to the candidates (p. 256). While the issue was the race, the attributes elaborated on that issue.

Another example of issues influencing public opinion involves research on print coverage of Hurricane Andrew, which damaged South Florida and parts of Louisiana in 1992. While Salwen’s (1995) research examines sources and quotes more so than media coverage, his findings offer evidence relative to this study. Salwen (1995) found that a considerable amount of newspaper coverage was given to storm victims and state and local officials in stories from natural disasters. The media placed human interest issues among print coverage more so than federal relief efforts, causing federal officials to be portrayed as “feeble and ineffectual in the national newspapers” (Salwen, 1995).

This study analyzes print media’s use of particular issues throughout coverage, including relief or rescue efforts, rebuilding or repairing attempts, positive and negative timeliness, promises made by government officials, economic issues, health concerns, and crime. Such a specific approach to the study of attribute agenda setting allows for the
investigation of media’s influence of particular events in more detail. Ghanem suggests, “The frequency with which a topic is mentioned probably has a more powerful influence than any particular framing mechanism (a focal point of news presentation), but framing mechanisms could serve as catalysts to frequency in terms of agenda setting” (p. 12). In other words, while repeatedly mentioned topics may influence public opinion, emphasis or elaboration of these repeated topics may prove even more influential. For example, print coverage of Hurricane Katrina’s destruction described the same particular scenes in a number of stories depicting thousands of people trapped in the New Orleans Superdome, and outside the Morial Convention Center, portraying a need for rescue and relief. One might assume that such coverage from many newspapers nationwide encouraged a more aggressive rescue/relief response by government officials. This study examines topic to expand upon researchers’ understanding of media’s influence during coverage of a natural disaster. Based on the literature review, the following question is asked:

**RQ3**: Which attributes of the hurricane issue receive more or less coverage by print media during coverage of a natural disaster?

Like frames, topics are likely to change throughout coverage, as identified by Baysha and Hallahan (2004). Therefore, based on their findings and the literature review, a similar question concerning time is applicable in assessing topics.

**RQ4**: Will the order of the prescribed topics vary throughout disaster coverage?

**Tone**

Framing and second level agenda setting, both relatively new developments of agenda setting, are an approach by researchers to understand how the media either frame
or portray an issue (Takeshita, 1997). Another important element involves the tone in which media use on their coverage of news. This study analyzes print media’s tone of different levels of government to find whether the media are positive, neutral, or negative in their coverage of government officials. In doing so, it uses a number of descriptive words to establish an accurate and detailed perspective of print media’s influence, and examines them on a three-point interval scale.

The content of a news story before its dissemination causes news outlets to develop expectations about how information is organized and presented. Hamilton (2004) suggested that packaged information formed into news stories ultimately depends on economics. Hamilton (2004) described news stories as information goods with fixed costs in a consumer driven market. In other words, creating and disseminating news is expensive. Downs (1957) suggested that people want information for four functions: consumption, production, entertainment, and voting. To benefit from news, people must consume it, and by doing so, they may use what they know to produce goods or services. Entertainment information keeps consumers interested but is not necessary in the decision making process. Finally, voting allows the consumer to take part as a citizen. Such influences, along with others that developed as journalism has grown into a profession, sway news. As such, Hamilton (2004) argued that “news is a commodity, not a mirror image of reality” (p. 7).

Hamilton (2004) refers to soft news as news with low levels of public affairs information and hard news as news with high levels of public affairs information. For example, a story about celebrity marriages is considered soft news, whereas a story about progress on the war in Iraq is referred to as hard news. The balance between hard and soft
news depends on costs such as advertisements, assembling the story, changes in professional norms, corporate ownership preferences of journalistic standards, and expectations of news content.

Hard news is often more expensive and more difficult to acquire than soft news. In his book about the media’s ongoing inaccurate portrayal of Muslims, Said (1981) argued that the media, in seeking profit, promote some messages rather than others. Said (1981) added that the media create an Islamic image and a stereotyped message for people to identify. As such, hard news becomes soft, and inaccurate in an attempt to entertain and increase profit. Such misinformation was common in the case of media coverage throughout Hurricane Katrina. In what Iyengar (1991) might refer to as an episodic event, journalists from throughout the country made day-long and even hour-long visits to New Orleans in an attempt to describe the area’s flooding and devastation. As a result, convoluted stories of murder, rape, including rapes of children, and violence were embellished and spread throughout the country. In addition, shallow media coverage of fights between officials, rumors of a hundred thousand dead, and horrors that occurred in the Superdome and Morial Convention Center were both reported and taken out of context in many cases. In an attempt to capture audience interest, hard news like government response was sometimes replaced with soft news including embellished individual stories.

According to Hamilton (2004), “Hard news loses out because of the dumbing down of reader and viewer interests” (p. 2). Mindich (1998) discussed concerns about journalistic objectivity, suggesting that as early as the 1830s, particular moments in history, including detachment, nonpartisanship, the inverted pyramid, naïve empiricism
and balance, led to new developments in journalism as a profession, thereby challenging
the idea of objective news. The development of the penny press, along with advertising
led to a rapid decline of the partisan press. Advertisers were attracted to newspapers with
larger audiences. Hamilton (2004) said, “As a result, papers began to drop overt political
bias and proclaim their independence in covering news of government and politics” (p.
3). Such influences including competition, ownership, and technology, along with the
public’s lack of interest in hard news limits news values. Therefore, “objective news
coverage is a commercial product that emerges from market forces” (Hamilton, 2004, p.
37).

While professionalization of journalism is a form of self-regulation promising
journalistic objectivity, the media often slant coverage with impartiality, subjectivity, and
partisanship. The media can affect government officials’ status, especially during a
disaster. Natural disasters give citizens the chance to criticize the character and capacity
of elected leaders. An everyday local politician can take on a larger-than-life dimension,
whether as hero or unfortunate victim, as reporters spin their stories about crisis and
response (Salwen, 1995). Moreover, Salwen’s (1995) research of Hurricane Andrew
coverage found more government blame than praise in both community and national
newspapers.

Hester and Gibson address the use of tone as an element of attribute agenda
setting. Traditionally, it is understood that media mirror public opinion and monitor
change, not purposefully influence public opinion (Hester & Gibson, 2003). However,
“traditional notions of news also suggest that the bulk of media coverage will be
negative” (p. 76). Hester and Gibson (2003) suggest that media are often charged with overemphasizing negative news and downplaying positive news.

The media is assigned an even more powerful and influential role in the shaping of not only social issues, but government officials. In their analysis of candidate images, McCombs et al. (1997) found evidence of attribute agenda setting effects on voters’ candidate descriptions, highlighting the media agenda’s influence on the public agenda. This exemplifies the influence and affect that tone has on shaping public opinion.

Therefore, based on the literature review, the following research questions are posited:

RQ5: Will the overall tone of the newspapers offer a positive, neutral, or negative description of government officials and their response to a natural disaster?

RQ6: Will tone vary throughout disaster coverage?
Chapter 3 Method

This study used quantitative content analysis to investigate the frames used in print media’s coverage of government officials in stories discussing government response following Hurricane Katrina, and compared them to Semetko and Valkenburg’s (2000) ordered frames. In addition, it analyzed print media’s use of attribute valence throughout coverage of government officials. Finally, the study examined the tone in which print media coverage portrayed each level of government.

In doing so, this study examined five weeks of print media coverage from the day of the hurricane through the initial response: August 27 to October 1, 2005. Each story was the unit of analysis. All framing, issue attribute, and tone variables used in this study were determined after reading and analyzing each story. This sample period was selected because crisis communication influences the media for only a short time before long term communication strategies develop (Martin & Boynton, 2005). While Hurricane Katrina did not actually reach the Gulf Coast until August 29, government officials had begun taking action, including evacuation and relief preparations, about two days prior to its arrival. To narrow such a broad topic like Hurricane Katrina, the parameters of the article selection for this study involved identifying only the stories that involved federal, local, or state government response to the hurricane. This operational definition of articles selected ensures that this study will provide an accurate picture of the government response to the event. Editorials were not analyzed, as well as issues pertaining to changes in high school, college, and professional sports schedules. The stories were retrieved using Lexis Nexis Academic database.
Print coverage was chosen in lieu of broadcast coverage for a few reasons. First, “Local (and with increasing frequency, national) television news often sacrifices discussion of public policy issues for sensationalized and ‘human interest’ news. Analyzing newspaper coverage captures a greater range of news coverage” (Lawrence, 2000, p. 11). In addition, elite newspapers “provide cues to other types of news organizations about what is newsworthy. Their importance therefore extends beyond their own readership to the content of other news media” (Lawrence, 2000, p. 11). In other words, it is possible that broadcast media get their news from elite print media, like The New York Times and/or the Washington Post. Finally, “despite dwindling readership… newspapers remain America’s premier source of public affairs information” (Robinson & Levy, 1996, p. 135).

Print media consisted of two elite newspaper and two local newspapers covering the hurricane. The elite papers used were the Washington Post and The New York Times because they are said to set the agenda for the nation. Located in the nation’s capitol, the Washington Post was also chosen for its proximity to government business and media. The Advocate, a Louisiana newspaper, was used because it is published in the state capital, Baton Rouge, only about one hour away from the center of the storm. Finally, the Times Picayune was chosen for its proximity to the disaster. There were 531 stories analyzed that fit the above criteria.

Frames

Following the methods used by Semetko and Valkenburg (2000), this study listed common deductive frames often found in media reports and coded occurrences of these frames in the articles that contained federal, state, or local government response. The
frames used were conflict, human interest, morality, economic consequence, and attribution of responsibility. Frames were recorded using the same instrument employed by Semetko and Valkenburg (2000), which contained a series of 20 dichotomous orientated response questions in order to create a frame factor score for each item. Results were then compared to Semetko and Valkenburg’s ordered frames to examine whether a crisis changes framing of print media coverage.

Conflict frame, common in U.S. news coverage, appeared when media emphasized conflict between individuals or groups to attract audience interest (Semetko & Valkenburg, 2000). Political discussion in the news reduces complex debate into simplistic conflict (Semetko & Valkenburg 2000). For example, President Bush and Louisiana Governor Blanco could be framed in conflict over who had control over the Louisiana National Guard. An illustration of this was provided by an article in The Advocate where it was said that “Mississippi Governor Haley Barbour got a hug. Governor Kathleen Blanco was lucky to get a hello (Millhollon & Ballard, 2005, p. 1-A).”

Human interest frame presented a human face or an emotional angle to an issue or problem. It personalized news in an attempt to keep audience interest (Semetko & Valkenburg, 2000). After the hurricane, print media published these more personalized and emotional accounts from people directly affected by the hurricane. For example, this quote published in The New York Times used a first-person, emotional account to discuss recovering from the hurricane: "I keep telling myself it's going to be all right. But I just want to know, where's my baby?" (Saulny, 2005, p. 1-A).
Morality frame placed the issue or problem “in the context of religious tenets or moral prescriptions” (Semetko & Valkenburg, 2000, p. 96). In the case of a natural disaster, which brings both hope and despair, people often look to God and faith for answers. After Hurricane Katrina, President Bush tried to lift spirits with a faith-based optimism, saying, “In the life of our nation, we have seen that wondrous things are possible when we act with God's grace” (Maggi, 2005, A03).

Economic consequences frame occurred when a news story reported on an issue in terms of its economic consequences on an individual, group, institution, region, or country (Semetko & Valkenburg, 2000). Neumen, Just and Crigler (1992) identified it as a common frame in the news. Depending upon the impact of the event, economic consequences are high. For example, Hurricane Katrina devastated and severely flooded parts of Louisiana destroying homes and buildings. Tourism, gambling, shipping, oil refineries and seafood are vital to the state’s economic well-being.

Attribution of responsibility frame presented an issue or problem and attributed responsibility of a cause or solution to either the government or an individual group (Semetko & Valkenburg, 2000). For example, the media blamed President Bush, FEMA and Governor Blanco for a slow response. Print coverage reported many quotes as rescuers arrived like these taken from The Advocate and Associated Press, “What took you so long?” and “We're hurting out here, man. We got to get help” (Tanner, 2005, p. NA). The U.S. shapes the public’s ideas of who is responsible for causing or solving problems (Iyengar, 1987).
Issue Attributes

Some researchers (Lopez-Escobar et al., 1999; McCombs et al., 2000) link media’s salience of attributes to audience perceptions, inferring that the public is influenced by what the media deem important (Kiousis, 2005). This study examined specific topics or attributes discussed throughout print media coverage of Hurricane Katrina. De Vreese et al. (2001) argued, “an issue-specific approach to the study of news frames allows for investigation of the framing of particular events in great specificity and detail” (p. 108). The issue attributes used in this study were determined from a pilot study exploring similar research. The issues were chosen based on more than 260 news stories from Hurricane Katrina during the same five-week print coverage. As such, the following topics examined included relief/rescue, rebuild/repair, government promises, positive and negative timeliness, economic concerns, health, and crime. The use of these attributes or topics in print media coverage presents the audience with “how” to think about Hurricane Katrina.

Relief and rescue stories were common throughout print media coverage. Such issues included citizens, police, and National Guard rescues of people trapped in or on top of homes, buildings, trees, etc. The breached levees, which caused massive flooding made rescue efforts a main priority. As such, an important issue of analysis is relief and rescue.

Another relevant issue involves rebuilding and repairing. The breached levees were in desperate need of a quick fix as water continued to flood the city. Repairing attempts were reported, with the Times Picayune mentioning the Army Corps of Engineers efforts to build a dam blocking the entrance of the 17th Street Canal at the Old
Hammond Highway Bridge and using sheet piling to plug the large breach on the canal’s eastern side that flooded much of the city (Moller & Schleifstein, 2005). Relative to repair efforts, rebuilding was often mentioned in print news coverage. One optimistic story from the *Times Picayune* mentioned rebuilding Lakeview ten feet above sea level. But other stories quoted officials’ negative thoughts about rebuilding, including Speaker of the House Dennis Hastert who questioned how much federal aid should be given in the city’s reconstruction, with a quote from the *Advocate* that said, “it looks like a lot of that place could be bulldozed” (p. 10-B).

Promises from local, federal, and state government were consistent throughout print media coverage. They promised National guardsmen, food and supplies, buses to move evacuees from New Orleans, and the rebuilding of New Orleans. While many promises were met, the time it took to happen was considered sluggish by the Associated Press (Deslatte, 2005). Therefore, another issue to include in this study is timeliness. After FEMA Director Michael Brown was fired, the U.S. Senate opened an investigation to examine slow response to the storm. The Associated Press reported that it took officials and rescuers six days to empty the Superdome, where large masses of the city’s poor who could not evacuate New Orleans were directed to ride out the storm. This study assesses positive timeliness and negative timeliness separately to find how media covered timeliness of government response.

Another issue of interest, possibly nationally, involves economic concerns. Such issues as receiving insurance money, tax questions, paying bills, and business revenue were popular concerns among Katrina victims. The media provided information of who to call and how to reach insurance agents.
Health was a major concern in New Orleans. With stagnant water throughout the city, mosquito infestation was a concern. In addition, the *Advocate* reported that mold growing on walls made houses unlivable. Upon returning to their homes in Metairie and Kenner, officials told residents to bury their spoiled meat, poultry and seafood somewhere on their property instead of bagging it with other trash.

Finally, crime was an issue as looters stole everything from diapers and necessities, to tennis shoes and televisions. The media reported shootings at and by police officers. The *Advocate* said that snipers were shooting at engineers. Calls went out for additional troops and police.

It is important to analyze issue attributes, as they contribute understanding to the media’s agenda. The seven issue attributes studied were not the only issues discussed by the media, however, they are the more common issues of media and public interest.

**Tone**

Tone was examined on an interval scale to determine the extent to which print media use words to frame coverage. This study examined overall tone of the three levels of government. It did not recognize specific officials or representatives within each level. The analysis was partially adapted from Haigh et al. (2006), whose analysis of tone “consisted of six 7-interval semantic differential scales: good/bad, positive/negative, wise/foolish, valuable/worthless, favorable/unfavorable, and acceptable/unacceptable” in a study concerning overall tone of coverage toward the military (p. 147). Most of the descriptors were replaced, as the following were a better fit for this particular study regarding government response to a natural disaster. The descriptors were chosen from
previous research by a pilot study comparing Louisiana and Mississippi government response.

Instead of simply using a positive, neutral, or negative analysis, this study, like the Haigh et al. (2006) research, inductively generated a list of nine descriptors to describe the tone that print media present in reference to government officials. After investigating a number of stories, the following descriptions were chosen to assess media tone of government officials: successful/unsuccessful, fast/slow, efficient/inefficient, encouraging/discouraging, intelligent/unintelligent, appropriate/inappropriate, prepared/unprepared, active/passive, reliable/unreliable, and hopeful/doubtful.

To completely understand the description, each group is briefly defined here. Successful/unsuccessful involves how well government officials handled the natural disaster. The day after Hurricane Katrina hit, the *Times Picayune* said that Louisiana Senator David Vitter was satisfied with federal response to the hurricane. However, his opinion, like many others soon shifted as the media reported on slow response by government officials. Fast/slow explains the promptness or alacrity of government response.

Another important description involves efficiency of government officials. In a story from the Associated Press, Army Lt. General Russel Honore promised to get the victims out of the Superdome, saying, “As fast as we can, we'll move them out” (Breed, 2005). Efficiency involves organization and effectiveness in a timely manner. Honore’s words were an example of encouragement. In the case of a natural disaster, officials encourage citizens by portraying the positive aspects. For example, Mayor Nagin’s initial discouraging estimation of 10,000 dead in New Orleans was superseded when the Times
Picayune quoted Chief of Homeland Security Terry Ebbert saying, "I think there's some encouragement in what we found in the initial sweeps that some of the catastrophic death that some people predicted may not, in fact, have occurred" (Nolan, p. A01).

Intelligence measured government officials’ aptitude and cleverness in handling a natural disaster. Not to be confused with its involvement with communications, intelligence is examined by media’s portrayal of brainpower vs. stupidity. For example, one volunteer rescuer quoted in the Advocate said that FEMA’s rule not allowing pets to be rescued was stupid and that “More people are going to die because of that” (Davis, 2005, p. 1-A). Such a rule may also have been deemed inappropriate, as it may have slowed rescue efforts. Appropriate involves the government’s correct, proper, or right way of handling issues.

Lack of preparedness was often discussed throughout print media coverage of government officials. Preparedness means not just awareness, but being organized and ready. The media criticized the federal government for knowing about the insufficient levees, but failing to do anything about them. The government played a passive, rather than active role in matters concerning New Orleans levees. Instead of preparing ahead of time, the federal government was unreceptive and even submissive to the levee issue.

Reliability is determined by the federal government’s consistency, dependability and trustworthiness. Once promises were broken regarding relief efforts, Katrina victims felt they could no longer trust the government to provide for them. Finally, hope and doubt are examined to see whether levels of government are portrayed as either confident or cynical in the recovery from damage wrought by Hurricane Katrina.
The ten descriptive tones offer more than just an analysis of positive, neutral, or negative coverage. They show a more expressive and vivid portrayal that print media use in covering government officials. A thorough investigation of tone offers insight into how the media influence news through another element of agenda setting.

Two trained coders analyzed the news stories studied. Intercoder reliability was established by randomly selecting 10% of the stories of this study’s sample for each coder to analyze. Intercoder reliability was 80.1%, ranging from 67% to 100% using Holsti’s formula measuring the percentage of agreement, and differences were reconciled throughout the coding process.
Chapter 4 Results

Each story was analyzed using a quantitative content analysis. Two elite newspapers—*The New York Times* (*n* = 62) and *The Washington Post* (*n* = 56)—and two local newspapers—*The Times Picayune* (*n* = 296) and *The Advocate* (*n* = 117)—altogether covered 531 stories regarding government response to Hurricane Katrina between August 27 and October 1, 2005. Percentages for each variable examined are shown in Tables 1 and 2. Table 1 shows framing variables and issue attribute variables. Table 2 shows Tone variables.

Frame Factors

To analyze the frames, Semetko and Valkenburg’s (2000) method of factor analyzing the 20 frame questions was used and a principle components factor analysis using varimax rotation yielded the same five frame factors as found in previous research. The five factors explained 61.19% of the variance. Mean scores and factor loadings for each individual frame factor are shown in Table 2.

Factor 1 was the human interest frame, whose variables included human example, use of adjectives that generate feelings, emphasis on those that were affected, discussion of personal lives, and whether visual information that generated feeling was present. The Cronbach’s inter-item reliability coefficient score for this 5-item factor frame was .72.

Factor 2 was the conflict frame, whose variables involved disagreement between groups, one party criticizing another, presentation of two sides of an issue, and discussion of winners and losers. The Cronbach’s inter-item reliability coefficient score for factor 2 conflict frame was .78.

Factor 3 was the attribution of responsibility frame, whose variables included the
<table>
<thead>
<tr>
<th>Frame Indices</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Interest Frame Index</td>
<td></td>
</tr>
<tr>
<td>Human example or “human face” on the issue</td>
<td>33.9%</td>
</tr>
<tr>
<td>Adjectives or personal vignettes that generate feelings</td>
<td>40.5%</td>
</tr>
<tr>
<td>Individuals and groups are affected by the issue/problem*</td>
<td>51.4%</td>
</tr>
<tr>
<td>Personal or private lives of the actors</td>
<td>20.9%</td>
</tr>
<tr>
<td>Visual information that generates feelings</td>
<td>30.7%</td>
</tr>
<tr>
<td>Conflict Frame Index</td>
<td></td>
</tr>
<tr>
<td>Disagreement between parties/individu...</td>
<td>37.9%</td>
</tr>
<tr>
<td>Party-individual-group-county criticize another</td>
<td>34.3%</td>
</tr>
<tr>
<td>Two or more sides of the problem or issue</td>
<td>39.0%</td>
</tr>
<tr>
<td>Reference to winners and losers</td>
<td>12.8%</td>
</tr>
<tr>
<td>Attribution of Responsibility Frame Index</td>
<td></td>
</tr>
<tr>
<td>Some level of government has the ability to alleviate the problem</td>
<td>74.4%</td>
</tr>
<tr>
<td>Some level of government is responsible for the issue/problem</td>
<td>59.7%</td>
</tr>
<tr>
<td>Solution(s) to the problem/issue</td>
<td>57.8%</td>
</tr>
<tr>
<td>An individual or group is responsible for the issue/problem</td>
<td>64.6%</td>
</tr>
<tr>
<td>Problem requires urgent action</td>
<td>63.3%</td>
</tr>
<tr>
<td>Economic consequences frame</td>
<td></td>
</tr>
<tr>
<td>Financial losses or gains now or in the future</td>
<td>43.5%</td>
</tr>
<tr>
<td>Cost/degree of expense involved</td>
<td>39.9%</td>
</tr>
<tr>
<td>Economic consequences of pursuing or not pursuing a course of action</td>
<td>27.9%</td>
</tr>
<tr>
<td>Morality Frame Index</td>
<td></td>
</tr>
<tr>
<td>Moral message</td>
<td>7.7%</td>
</tr>
<tr>
<td>Reference to morality, God and other religious tenets</td>
<td>7.2%</td>
</tr>
<tr>
<td>Specific social prescriptions about how to behave</td>
<td>9.6%</td>
</tr>
<tr>
<td>Issue Attribute Indices</td>
<td></td>
</tr>
<tr>
<td>Relief/Rescue</td>
<td></td>
</tr>
<tr>
<td>Example of relief/rescue efforts</td>
<td>45.0%</td>
</tr>
<tr>
<td>Need for relief/rescue efforts</td>
<td>58.8%</td>
</tr>
<tr>
<td>Relief/rescue attempts or failures</td>
<td>28.4%</td>
</tr>
<tr>
<td>Rescue attempts going well, or highlighting a positive rescue story</td>
<td>13.9%</td>
</tr>
<tr>
<td>Economy</td>
<td></td>
</tr>
<tr>
<td>Loss of property</td>
<td>32.6%</td>
</tr>
<tr>
<td>Insurance issues</td>
<td>8.5%</td>
</tr>
<tr>
<td>Costs to rebuild</td>
<td>26.2%</td>
</tr>
<tr>
<td>Any level of government financial support</td>
<td>38.6%</td>
</tr>
<tr>
<td>Loss of jobs or unemployment caused by the hurricane</td>
<td>12.2%</td>
</tr>
<tr>
<td>Loss of private business revenue (casinos, stores, etc.)</td>
<td>10.9%</td>
</tr>
<tr>
<td>Negative Timeliness</td>
<td></td>
</tr>
<tr>
<td>Need for timely response</td>
<td>51.0%</td>
</tr>
<tr>
<td>Lack of timeliness of government response</td>
<td>26.6%</td>
</tr>
<tr>
<td>How slowly any type of reaction or response occurred</td>
<td>23.0%</td>
</tr>
</tbody>
</table>
### Rebuild/repair

<table>
<thead>
<tr>
<th>Plan</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plans to rebuild/repair</td>
<td>45.8%</td>
</tr>
<tr>
<td>Present rebuilding/repairing</td>
<td>19.2%</td>
</tr>
<tr>
<td>Some organization, group, or institution is making efforts to rebuild/repair</td>
<td>36.5%</td>
</tr>
<tr>
<td>Citizens will permanently return to New Orleans to rebuild/repair</td>
<td>11.1%</td>
</tr>
<tr>
<td>New Orleans should /should not be repaired</td>
<td>11.9%</td>
</tr>
</tbody>
</table>

### Human concern

<table>
<thead>
<tr>
<th>Issue</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health issues</td>
<td>29.0%</td>
</tr>
<tr>
<td>Dying or deceased victims</td>
<td>20.5%</td>
</tr>
<tr>
<td>Missing or lost relatives/friends</td>
<td>6.4%</td>
</tr>
<tr>
<td>Katrina victims’ struggles/losses</td>
<td>35.2%</td>
</tr>
<tr>
<td>A positive personal outcome due to the hurricane</td>
<td>5.8%</td>
</tr>
</tbody>
</table>

### Government Promises

<table>
<thead>
<tr>
<th>Promise</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any level of government making promises</td>
<td>33.0%</td>
</tr>
<tr>
<td>Absolutes made by government or public officials</td>
<td>19.8%</td>
</tr>
<tr>
<td>A positive and optimistic future</td>
<td>16.0%</td>
</tr>
<tr>
<td>Broken promises</td>
<td>7.9%</td>
</tr>
</tbody>
</table>

### Positive Timeliness

<table>
<thead>
<tr>
<th>Timeliness</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timely response from any form of government occurred</td>
<td>21.1%</td>
</tr>
<tr>
<td>Timeliness of government response was adequate</td>
<td>13.0%</td>
</tr>
<tr>
<td>How quickly any type of reaction or response occurred*</td>
<td>19.4%</td>
</tr>
</tbody>
</table>

### Crime

<table>
<thead>
<tr>
<th>Crime</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acts of violence/crime</td>
<td>20.7%</td>
</tr>
<tr>
<td>Police/government efforts to resolve crime issues/problems</td>
<td>17.1%</td>
</tr>
<tr>
<td>A need for police</td>
<td>17.9%</td>
</tr>
</tbody>
</table>

*suggestion that some level of government could alleviate the problem/issue, that some level of government was responsible, solutions to the problem/issue, that an individual or group was responsible, and that the problem required urgent action. Cronbach’s inter-item reliability coefficient score for factor 3 attribution of responsibility frame was .72.

Factor 4 was the economic consequences frame, whose variables mentioned financial losses or gains, cost/degree of expenses, and economic consequences of pursuing or not pursuing a course of action. Cronbach’s inter-item reliability coefficient score for factor 4 economic consequences frame was .81.

Factor 5 was the morality frame, whose variables asked whether the story contained a moral message, if it referred to God or religious tenets, and whether the story...
Table 2. Percentage of Each Tone Variable for Federal, State, and Local Government

<table>
<thead>
<tr>
<th></th>
<th>Federal</th>
<th>State</th>
<th>Local</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Negative</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Successful/Unsuccessful</td>
<td>12.2%</td>
<td>6.8%</td>
<td>16.2%</td>
</tr>
<tr>
<td>Fast/Slow</td>
<td>9.4%</td>
<td>4.9%</td>
<td>15.6%</td>
</tr>
<tr>
<td>Efficient/Inefficient</td>
<td>20.5%</td>
<td>8.9%</td>
<td>24.1%</td>
</tr>
<tr>
<td>Encouraging/Discouraging</td>
<td>26.6%</td>
<td>13.6%</td>
<td>25.6%</td>
</tr>
<tr>
<td>Intelligent/Unintelligent</td>
<td>13.9%</td>
<td>6.6%</td>
<td>18.1%</td>
</tr>
<tr>
<td>Appropriate/Inappropriate</td>
<td>36.7%</td>
<td>15.1%</td>
<td>37.3%</td>
</tr>
<tr>
<td>Prepared/Unprepared</td>
<td>11.1%</td>
<td>7.7%</td>
<td>16.4%</td>
</tr>
<tr>
<td>Reliable/Unreliable</td>
<td>21.1%</td>
<td>8.9%</td>
<td>23.4%</td>
</tr>
<tr>
<td>Active/Passive</td>
<td>45.6%</td>
<td>20.5%</td>
<td>41.4%</td>
</tr>
<tr>
<td>Hopeful/Doubtful</td>
<td>27.3%</td>
<td>12.2%</td>
<td>26.7%</td>
</tr>
<tr>
<td><strong>Neutral</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Successful/Unsuccessful</td>
<td>31.3%</td>
<td>21.3%</td>
<td>25.0%</td>
</tr>
<tr>
<td>Fast/Slow</td>
<td>35.2%</td>
<td>25.2%</td>
<td>32.2%</td>
</tr>
<tr>
<td>Efficient/Inefficient</td>
<td>25.4%</td>
<td>21.5%</td>
<td>22.6%</td>
</tr>
<tr>
<td>Encouraging/Discouraging</td>
<td>25.4%</td>
<td>17.9%</td>
<td>18.5%</td>
</tr>
<tr>
<td>Intelligent/Unintelligent</td>
<td>47.8%</td>
<td>25.4%</td>
<td>30.9%</td>
</tr>
<tr>
<td>Appropriate/Inappropriate</td>
<td>16.8%</td>
<td>15.8%</td>
<td>10.4%</td>
</tr>
<tr>
<td>Prepared/Unprepared</td>
<td>35.2%</td>
<td>20.9%</td>
<td>25.0%</td>
</tr>
<tr>
<td>Reliable/Unreliable</td>
<td>31.5%</td>
<td>21.1%</td>
<td>25.0%</td>
</tr>
<tr>
<td>Active/Passive</td>
<td>11.5%</td>
<td>11.7%</td>
<td>9.8%</td>
</tr>
<tr>
<td>Hopeful/Doubtful</td>
<td>34.3%</td>
<td>20.3%</td>
<td>21.5%</td>
</tr>
<tr>
<td><strong>Positive</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Successful/Unsuccessful</td>
<td>29.8%</td>
<td>8.9%</td>
<td>14.5%</td>
</tr>
<tr>
<td>Fast/Slow</td>
<td>28.6%</td>
<td>6.8%</td>
<td>7.9%</td>
</tr>
<tr>
<td>Efficient/Inefficient</td>
<td>27.3%</td>
<td>6.4%</td>
<td>9.0%</td>
</tr>
<tr>
<td>Encouraging/Discouraging</td>
<td>21.3%</td>
<td>5.3%</td>
<td>11.7%</td>
</tr>
<tr>
<td>Intelligent/Unintelligent</td>
<td>11.5%</td>
<td>4.7%</td>
<td>6.8%</td>
</tr>
<tr>
<td>Appropriate/Inappropriate</td>
<td>19.8%</td>
<td>5.8%</td>
<td>8.1%</td>
</tr>
<tr>
<td>Prepared/Unprepared</td>
<td>26.9%</td>
<td>8.1%</td>
<td>14.3%</td>
</tr>
<tr>
<td>Reliable/Unreliable</td>
<td>20.7%</td>
<td>6.8%</td>
<td>7.3%</td>
</tr>
<tr>
<td>Active/Passive</td>
<td>16.2%</td>
<td>4.5%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Hopeful/Doubtful</td>
<td>11.7%</td>
<td>4.3%</td>
<td>7.5%</td>
</tr>
</tbody>
</table>

offered social prescriptions of how to behave. Cronbach’s inter-item reliability coefficient score for factor 5 morality frame was .56.

Media’s Use of Frames

The first research question asked how the media framed the government’s response to a natural disaster. The mean score for each frame revealed the media’s overall use of the frame in the government’s response to a natural disaster. The following
Table 3. Mean Scores and Factor Analysis of Frames Used in Media Articles about Government Response to Hurricane Katrina

<table>
<thead>
<tr>
<th>Frame Indices</th>
<th>M</th>
<th>SD</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Human Interest Frame Index (a = .72)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human example or &quot;human face&quot; on the issue</td>
<td>.34</td>
<td>.47</td>
<td>.83</td>
</tr>
<tr>
<td>Adjectives or personal vignettes that generate feelings</td>
<td>.40</td>
<td>.49</td>
<td>.81</td>
</tr>
<tr>
<td>Individuals and groups are affected by the issue/problem*</td>
<td>.51</td>
<td>.50</td>
<td>.81</td>
</tr>
<tr>
<td>Personal or private lives of the actors</td>
<td>.21</td>
<td>.41</td>
<td>.78</td>
</tr>
<tr>
<td>Visual information that generates feelings</td>
<td>.31</td>
<td>.46</td>
<td>.78</td>
</tr>
<tr>
<td>Conflict Frame Index (a = .78)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disagreement between parties/individuals-groups-countries</td>
<td>.38</td>
<td>.49</td>
<td>.83</td>
</tr>
<tr>
<td>Party-individual-group-county criticize another</td>
<td>.34</td>
<td>.48</td>
<td>.80</td>
</tr>
<tr>
<td>Two or more sides of the problem or issue</td>
<td>.39</td>
<td>.49</td>
<td>.78</td>
</tr>
<tr>
<td>Reference to winners and losers</td>
<td>.13</td>
<td>.33</td>
<td>.59</td>
</tr>
<tr>
<td>Attribution of Responsibility Frame Index (a = .72)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some level of government has the ability to alleviate the problem</td>
<td>.74</td>
<td>.44</td>
<td>.74</td>
</tr>
<tr>
<td>Some level of government is responsible for the issue/problem</td>
<td>.60</td>
<td>.49</td>
<td>.69</td>
</tr>
<tr>
<td>Solution(s) to the problem/issue</td>
<td>.58</td>
<td>.49</td>
<td>.68</td>
</tr>
<tr>
<td>An individual or group is responsible for the issue/problem</td>
<td>.65</td>
<td>.48</td>
<td>.66</td>
</tr>
<tr>
<td>Problem requires urgent action</td>
<td>.63</td>
<td>.48</td>
<td>.60</td>
</tr>
<tr>
<td>Economic Consequences Frame Index (a = .81)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial losses or gains now or in the future</td>
<td>.44</td>
<td>.50</td>
<td>.88</td>
</tr>
<tr>
<td>Cost/degree of expense involved</td>
<td>.40</td>
<td>.49</td>
<td>.84</td>
</tr>
<tr>
<td>Economic consequences of pursuing or not pursuing a course of action</td>
<td>.28</td>
<td>.45</td>
<td>.80</td>
</tr>
<tr>
<td>Morality Frame Index (a = .56)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moral message</td>
<td>.08</td>
<td>.27</td>
<td>.79</td>
</tr>
<tr>
<td>Reference to morality, God and other religious tenets</td>
<td>.07</td>
<td>.26</td>
<td>.71</td>
</tr>
<tr>
<td>Specific social prescriptions about how to behave</td>
<td>.10</td>
<td>.30</td>
<td>.60</td>
</tr>
<tr>
<td>*Results showed that intercoder reliability for this variable was less than .7.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mean scores range from 1-3, with 1 defined as negative, 2 as neutral, and 3 as positive.

Examining the mean scores of the standardized frames revealed that the factor 1 human interest frame (M = 3.2; SD = 1.64), with a range of five, appeared most often throughout the analyzed print coverage. The second common frame, with a range of four,
was factor 2 conflict frame ($M = 1.24; SD = 1.40$). The third most common frame was factor 3 attribution of responsibility frame ($M = 1.77; SD = 1.90$), with a range of five. The fourth common frame, with a range of four, was factor 4 economic consequences frame ($M = 1.11; SD = 1.22$). The final common frame that was least present in the analyzed print coverage, with a range of three, was factor 5 morality frame ($M = .24; SD = .60$).

**Week-to-Week Framing Differences**

The second research question asked whether the order of the common frames would change throughout this study’s 5-week disaster coverage. The study was separated into five weeks, with week 1 from August 27-September 2, week 2 from September 3-9, week 3 from September 10-16, week 4 from September 17-23, and week 5 from September 24–October 1. The mean score for each frame was determined for each week of disaster coverage. An ANOVA of varying frames throughout coverage offered several significant differences and variations of frames throughout the five weeks analyzed. All but one of the frame factors (economic consequences frame) offered statistically significant differences. Frame use throughout the five weeks analyzed are shown in Graph 1.

An ANOVA revealed that the media’s use of the human interest frame varied significantly from week to week, $F (4, 525) = 19.02, p \leq .001$. Using Tukey’s post hoc tests, statistically significant differences in the use of the human interest frame occurred between week 1 and 4 ($p \leq .001$), week 1 and 5 ($p \leq .001$), week 2 and 4 ($p \leq .001$), week 2 and 5 ($p \leq .001$), week 3 and 4 ($p \leq .001$), and week 3 and 5 ($p \leq .001$).
An ANOVA revealed that the media’s use of the conflict frame varied significantly from week to week, $F (4, 525) = 5.33, p < .001$. Using Tukey’s post hoc tests, statistically significant differences in the use of the conflict frame occurred between week 1 and 2 ($p < .001$), week 1 and 4 ($p < .001$), and week 5 and 1 ($p < .019$).

An ANOVA revealed that the media’s use of the attribution of responsibility frame varied significantly from week to week, $F (4, 525) = 10.08, p < .001$. Using Tukey’s post hoc tests, statistically significant differences in the use of the attribution of responsibility frame occurred between week 1 and 2 ($p < .001$), week 1 and 3 ($p < .001$), week 1 and 4 ($p < .004$), and week 1 and 5 ($p < .005$).

An ANOVA revealed that the media’s use of the morality frame varied significantly from week to week, $F (4, 525) = 2.60, p < .035$. Using Tukey’s post hoc tests, statistically significant differences in the use of the morality frame occurred between week 1 and 4 ($p < .032$).
**Issue Attribute Indices**

The issue attributes, developed from a pilot study, were conceptualized into a number of variables. An inductive set of 33 variables specific to media coverage of government response were then combined into eight attribute indices involving relief/rescue, rebuild/repair, negative timeliness, positive timeliness, government promises, economic issues, human concern, and crime. Mean scores for each question are shown in Table 4.

**Media’s Use of Issue Attributes**

The third research question asked which attributes of the hurricane issue received more or less coverage by print media. In order from most to least coverage, print media covered the issues relief/rescue, economic issues, negative timeliness, rebuild/repair, human concern, government promises, positive timeliness, and crime. It is necessary to point out, however, that four of the eight issue attribute indices contained low alpha scores, which were explained using Cronbach’s inter-item reliability coefficient score.

The relief/rescue index included four variables such as providing an example of relief/rescue efforts, suggesting the need for relief/rescue efforts, whether a story mentioned relief/rescue attempts or failures, and if there were successful or highlighted relief/rescue attempts. The relief/rescue issue was present in 63.1% of the stories in this analysis. Cronbach’s inter-item reliability coefficient score of the relief/rescue index was 77.

The economic issues index contained six variables, which mentioned loss of property, insurance issues, rebuilding costs, whether government financial support would occur, loss of jobs and unemployment issues, and loss of private business revenue.
Table 4. Mean Scores of Issue Attributes Used in Media Articles about Government Response to Hurricane Katrina

<table>
<thead>
<tr>
<th>Issue Attribute Indices</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relief/Rescue (a = .77)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Example of relief/rescue efforts</td>
<td>.45</td>
<td>.50</td>
</tr>
<tr>
<td>Need for relief/rescue efforts</td>
<td>.59</td>
<td>.49</td>
</tr>
<tr>
<td>Relief/rescue attempts or failures</td>
<td>.28</td>
<td>.45</td>
</tr>
<tr>
<td>Rescue attempts going well, or highlighting a positive rescue story</td>
<td>.14</td>
<td>.35</td>
</tr>
<tr>
<td>Economy (a = .57)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss of property</td>
<td>.33</td>
<td>.47</td>
</tr>
<tr>
<td>Insurance issues</td>
<td>.08</td>
<td>.28</td>
</tr>
<tr>
<td>Costs to rebuild</td>
<td>.26</td>
<td>.44</td>
</tr>
<tr>
<td>Any level of government financial support</td>
<td>.39</td>
<td>.49</td>
</tr>
<tr>
<td>Loss of jobs or unemployment caused by the hurricane</td>
<td>.12</td>
<td>.33</td>
</tr>
<tr>
<td>Loss of private business revenue (casinos, stores, etc.)</td>
<td>.11</td>
<td>.31</td>
</tr>
<tr>
<td>Negative Timeliness (a = .75)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Need for timely response</td>
<td>.51</td>
<td>.50</td>
</tr>
<tr>
<td>Lack of timeliness of government response</td>
<td>.27</td>
<td>.44</td>
</tr>
<tr>
<td>How slowly any type of reaction or response occurred</td>
<td>.23</td>
<td>.42</td>
</tr>
<tr>
<td>Rebuild/repair (a = .75)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plans to rebuild/repair</td>
<td>.46</td>
<td>.50</td>
</tr>
<tr>
<td>Present rebuilding/repair</td>
<td>.19</td>
<td>.39</td>
</tr>
<tr>
<td>Some organization, group, or institution is making efforts to rebuild/repair</td>
<td>.37</td>
<td>.48</td>
</tr>
<tr>
<td>Citizens will permanently return to New Orleans to rebuild/repair</td>
<td>.11</td>
<td>.32</td>
</tr>
<tr>
<td>New Orleans should /should not be repaired</td>
<td>.12</td>
<td>.32</td>
</tr>
<tr>
<td>Human concern (a = .64)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health issues</td>
<td>.29</td>
<td>.45</td>
</tr>
<tr>
<td>Dying or deceased victims</td>
<td>.21</td>
<td>.40</td>
</tr>
<tr>
<td>Missing or lost relatives/friends</td>
<td>.06</td>
<td>.25</td>
</tr>
<tr>
<td>Katrina victims’ struggles/losses</td>
<td>.35</td>
<td>.48</td>
</tr>
<tr>
<td>A positive personal outcome due to the hurricane</td>
<td>.06</td>
<td>.24</td>
</tr>
<tr>
<td>Government Promises (a = .51)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any level of government making promises</td>
<td>.35</td>
<td>.63</td>
</tr>
<tr>
<td>Absolutes made by government or public officials</td>
<td>.20</td>
<td>.40</td>
</tr>
<tr>
<td>A positive and optimistic future</td>
<td>.16</td>
<td>.37</td>
</tr>
<tr>
<td>Broken promises</td>
<td>.08</td>
<td>.27</td>
</tr>
<tr>
<td>Positive Timeliness (a = .64)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timely response from any form of government occurred</td>
<td>.21</td>
<td>.41</td>
</tr>
<tr>
<td>Timeliness of government response was adequate</td>
<td>.13</td>
<td>.34</td>
</tr>
<tr>
<td>How quickly any type of reaction or response occurred*</td>
<td>.19</td>
<td>.40</td>
</tr>
<tr>
<td>Crime (a = .86)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acts of violence/crime</td>
<td>.21</td>
<td>.41</td>
</tr>
<tr>
<td>Police/government efforts to resolve crime issues/problems</td>
<td>.17</td>
<td>.38</td>
</tr>
<tr>
<td>A need for police</td>
<td>.18</td>
<td>.38</td>
</tr>
</tbody>
</table>

*Results showed that intercoder reliability for this variable was less than .7.
Cronbach’s inter-item reliability coefficient score for this index was .57. While this alpha was low, it was often mentioned in the stories. Economic issues were present among 62.3% of the stories analyzed. The larger amount of variables for this particular index may have affected the alpha.

The negative timeliness index used three variables that asked if the story mentioned a need for timely response, whether there was a lack of timely government response, and whether the story suggested how slowly some type of government response occurred. The negative timeliness issue was present in 55.6% of the stories examined. Cronbach’s inter-item reliability coefficient score for the negative timeliness index was .75.

The rebuild/repair index included five variables that were concerned with plans to rebuild/repair, present rebuilding/repairing, whether some organization or group was making efforts to rebuild/repair, whether citizens would permanently return to New Orleans to rebuild/repair, and if New Orleans should or should not rebuild/repair. The rebuild/repair issue was present in 51.4% of the stories in this analysis. Cronbach’s inter-item reliability coefficient score was .75 for this index.

The human concern index, which used five variables, also showed a low alpha. This index asked whether stories mentioned health issues, dying or deceased victims, missing relatives/friends, whether the story tells of Katrina victims’ struggles/losses, and if the story mentioned a positive personal outcome due to the hurricane. Human concern was present in 49.7% of the stories analyzed. Cronbach’s inter-item reliability score was .64 for this index.
The government promises index contained four variables, which asked whether a story mentioned any level of government making promises, if absolutes were made by government or public officials, whether the story mentioned a positive/optimistic future, and if the story suggested broken promises made by any level of government. Government promises were present among 43.9% of the stories examined. Cronbach’s inter-item reliability coefficient score was .51 for this index. While this alpha was low, government promises were present throughout this analysis.

The positive timeliness index, also using three variables, was not mentioned as often as the negative timeliness index. This index included variables such as whether timely response from any form of government occurred, whether the timeliness of government response was adequate, and if the story mentioned how quickly any type of response occurred. The positive timeliness issue attribute was mentioned in 32.4% of the stories analyzed. Cronbach’s inter-item reliability for this index was .64.

The crime index, with three variables, asked whether the stories mentioned acts of violence/crime, police/government efforts to resolve crime issues/problems, and whether the stories suggested a need for police. The crime issue was present among 26.2% of the stories analyzed. Cronbach’s inter-item reliability coefficient score for this index was .86.

Week-to-Week Issue Attribute Differences

The fourth research question asked whether the order of the prescribed issue attributes would vary throughout the 5-week disaster coverage. An ANOVA of varying issue attributes throughout coverage offered statistically significant differences of the issue attributes over the five weeks analyzed. All but one of the issue attributes
(economic issues) offered statistically significant differences. Use of issue attributes throughout coverage is shown in Figure 2.

![Figure 2. Media’s Use of Issue Attributes throughout 5-week Coverage](image)

An ANOVA revealed that the media’s use of the relief/rescue issue attribute varied significantly from week to week, $F(4, 525) = 15.50, p < .001$. Using Tukey’s post hoc tests, statistically significant differences in the use of the relief/rescue issue attribute occurred between week 1 and 2 ($p < .013$), week 1 and 5 ($p < .016$), week 2 and 3 ($p < .001$), week 2 and 4 ($p < .001$), week 2 and 5 ($p < .001$), and week 3 and 5 ($p < .001$).

An ANOVA revealed that the media’s use of the negative timeliness issue attribute varied significantly from week to week, $F(4, 525) = 11.66, p < .001$. Using Tukey’s post hoc tests, statistically significant differences in the use of the negative timeliness issue attribute occurred between week 1 and 2 ($p < .010$), week 2 and 4 ($p < .001$), week 2 and 5 ($p < .001$), and week 3 and 5 ($p < .001$).
An ANOVA revealed that the media’s use of the rebuild/repair issue attribute varied significantly from week to week, $F\ (4,\ 525) = 16.82, \ p \leq .001$. Using Tukey’s post hoc tests, statistically significant differences in the use of the rebuild/repair issue attribute occurred between week 1 and 3 ($p \leq .005$), week 1 and 4 ($p \leq .049$), week 2 and 3 ($p \leq .004$), and week 3 and 5 ($p \leq .037$).

An ANOVA revealed that the media’s use of the human concern issue attribute varied significantly from week to week, $F\ (4,\ 525) = 15.00, \ p \leq .001$. Using Tukey’s post hoc tests, statistically significant differences in the use of the human concern issue attribute occurred between week 1 and 2 ($p \leq .001$), week 2 and 3 ($p \leq .003$), week 2 and 4 ($p \leq .001$), week 2 and 5 ($p \leq .001$), and week 3 and 5 ($p \leq .005$).

An ANOVA revealed that the media’s use of the government promises issue attribute varied significantly from week to week, $F\ (4,\ 525) = 4.67, \ p \leq .001$. Using Tukey’s post hoc tests, statistically significant differences in the use of the government promises issue attribute occurred between week 2 and 4 ($p \leq .009$), week 2 and 5 ($p \leq .032$), week 3 and 4 ($p \leq .009$), and week 3 and 5 ($p \leq .049$).

An ANOVA revealed that the media’s use of the positive timeliness issue attribute varied significantly from week to week, $F\ (4,\ 525) = 16.82, \ p \leq .001$. Using Tukey’s post hoc tests, statistically significant differences in the use of the positive timeliness issue attribute occurred between week 1 and 4 ($p \leq .001$), week 1 and 5 ($p \leq .001$), week 2 and 4 ($p \leq .001$), week 2 and 5 ($p \leq .005$), and week 3 and 4 ($p \leq .001$).

An ANOVA revealed that the media’s use of the crime issue attribute varied significantly from week to week, $F\ (4,\ 525) = 8.85, \ p \leq .001$. Using Tukey’s post hoc tests, statistically significant differences in the use of the crime issue attribute occurred
between week 1 and 3 \( (p \leq .022) \), week 2 and 3 \( (p \leq .001) \), week 2 and 4 \( (p \leq .001) \), and week 2 and 5 \( (p \leq .020) \).

**Media’s Use of Tone**

The fifth research question asked whether the overall tone of the newspapers offered a positive, neutral, or negative description of government response to a natural disaster. Tone was computed into indices, and was analyzed at the federal, state, and local levels. The study included ten descriptors to offer a more detailed overview of print media’s tone. The individual scores are reported in Table 5.

**Table 5. Mean Scores of Issue Attributes Used in Media Articles about Government Response to Hurricane Katrina**

<table>
<thead>
<tr>
<th>Tone</th>
<th>Federal M ( (N = 90) )</th>
<th>State M ( (N = 90) )</th>
<th>Local M ( (N = 90) )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Successful/Unsuccessful</td>
<td>2.43</td>
<td>2.13</td>
<td>2.21</td>
</tr>
<tr>
<td>Fast/Slow</td>
<td>2.48</td>
<td>2.12</td>
<td>2.03</td>
</tr>
<tr>
<td>Efficient/Inefficient</td>
<td>2.34</td>
<td>2.02</td>
<td>2.00</td>
</tr>
<tr>
<td>Encouraging/Discouraging</td>
<td>2.19</td>
<td>1.88</td>
<td>1.93</td>
</tr>
<tr>
<td>Intelligent/Unintelligent</td>
<td>2.12</td>
<td>2.02</td>
<td>1.90</td>
</tr>
<tr>
<td>Appropriate/Inappropriate</td>
<td>2.12</td>
<td>1.83</td>
<td>1.63</td>
</tr>
<tr>
<td>Prepared/Unprepared</td>
<td>2.29</td>
<td>2.09</td>
<td>2.20</td>
</tr>
<tr>
<td>Reliable/Unreliable</td>
<td>2.23</td>
<td>2.00</td>
<td>1.91</td>
</tr>
<tr>
<td>Active/Passive</td>
<td>1.76</td>
<td>1.62</td>
<td>1.40</td>
</tr>
<tr>
<td>Hopeful/Doubtful</td>
<td>2.04</td>
<td>1.88</td>
<td>1.86</td>
</tr>
</tbody>
</table>

Examining the mean scores of federal, state, and local tone indices revealed that overall response was slightly more positive than neutral with federal tone \( (M = 22.01; SD = 5.03) \), most positive. State tone \( (M = 19.60; SD = 4.82) \) was slightly more negative than neutral. Local tone \( (M = 19.08; SD = 4.85) \), more so than state tone, was slightly more negative than neutral. Tone in general was relatively neutral.

Examining the mean scores of each descriptor within federal state and local response revealed little variance among positive, neutral, and negative tone. Such
findings may be due to the short, ranged interval scale. One consistent finding among the 30 descriptors reveals the active/passive descriptor as the most positive descriptor among federal ($M = 1.76; SD = .865$), state ($M = 1.62; SD = .696$), and local ($M = 1.40; SD = .614$) response. In other words, media’s tone of federal, state, and local government, when mentioning whether their response was active or passive, often found it to be active. In contrast, the fast/slow descriptor was the most negative descriptor between federal ($M = 2.48; SD = .604$) and state ($M = 1.12; SD = .577$) government. Therefore, tone of federal and state government was considered slow by media. The most negative descriptor regarding local response ($M = 2.21; SD = .608$) was successful/unsuccessful. The media portrayed local government response as unsuccessful.

**Media’s Use of Tone between Elite and Local Media**

While this study’s purpose was to find overall tone of newspapers, further analysis between elite and local media offered significant findings as well. An analysis of tone with regard to elite and local print media was run using an independent sample T-Test, which concluded that there was a difference in coverage of tone between elite (*The New York Times* and the *Washington Post*) and local (*The Times Picayune* and the *Advocate*) media. All significant differences showed that elite media coverage was more positive than local media coverage, however, overall coverage was neutral.

Several tone descriptors were found to have statistically significant differences between elite and local media. Elite media (2.08) portrayed the federal government's reliability more positively than local media (1.96), $t (387) = 8.10, p \leq .005$. No other descriptors of federal government were found to have statistically significant differences.
Elite media (1.86) revealed the state response as more encouraging than local media (1.76), $t(387) = 5.79, p \leq .017$. Appropriateness of state government was depicted more positively by elite media (1.86) than local media (1.76), $t(387) = 17.97, p \leq .001$.

Reliability of state response was portrayed as more positive by elite media (2.07) than local media (1.92), $t(387) = 12.89, p \leq .001$. The elite media (1.86) depicted the activeness of state response more positively than local media (1.51), $t(387) = 9.76, p \leq .002$.

Fast response of local government was portrayed more positively by elite media (2.07) than local media (1.84), $t(387) = 28.23, p \leq .001$. Efficient response of local government was depicted more positively by elite media (1.83) than local media (1.72), $t(387) = 9.00, p \leq .003$. Encouraging response of local government was shown more positively by elite media (1.93) than local media (1.73), $t(387) = 23.42, p \leq .001$.

Reliability of local response was portrayed more positively by elite media (1.97) than local media (1.68), $t(387) = 45.26, p \leq .001$. Finally, the elite media (2.00) depicted local government hopefulness more positively than local media (1.62), $t(387) = 34.59, p \leq .001$.

**Week-to-Week Tone Differences**

The sixth research question asked whether tone of government response would vary throughout disaster coverage. An ANOVA of week-to-week coverage offered no statistically significant differences toward tone of federal, state, or local government response. Therefore, tone of government response was consistently neutral throughout coverage. Week-to-week tone differences are shown in Figure 3.
Figure 3. Media’s Use of Tone throughout 5-week Coverage
This study offered a wealth of information regarding framing, attribute agenda setting, and tone of all levels of government response in the context of a natural disaster with such a national impact. First, this study attempted to find the order of common frames by print media coverage of government response to a natural disaster. Several issues were examined within coverage to see which issue attributes were most and least common in coverage of government response to a natural disaster. Federal, state, and local tone was assessed to find whether coverage was positive, neutral, or negative regarding government response. Finally, frames, issue attributes, and tone were analyzed week-by-week to determine variations throughout coverage.

Media’s Use of Frames

Media framing of overall government response to a natural disaster dealt more with human interest and conflict than responsibility, economic consequences and morality. The results ordered human interest, conflict, attribution of responsibility, economic consequence, and morality. These findings differ from Semetko and Valkenburg’s (2000) research, emphasizing human interest and conflict over responsibility. Hurricane Katrina and its aftermath put lives at stake, making human interest a priority among coverage. Moreover, much was said about how problems such as lack of communication and slow response among federal, state, and local government, might have been avoided, which created conflict. This difference in order of frames, when compared to Semetko and Valkenburg’s (2000) findings from regular coverage, may be because Hurricane Katrina was a major natural disaster. This disaster may have caused print media framing to shift importance to human interest issues like relief and rescue. In addition, the conflict frame was more common than responsibility, possibly
because of the lack of communication and miscommunication among federal, state, and local officials. *The Times Picayune* reported Governor Blanco making the excuse, “Part of the big problem is the communications network is down” (Maggi, 2005, p. A10). In addition, Mayor Nagin was quoted by *The Times Picayune* complaining, “I got cell phones from as high up as the White House that didn't work. My Blackberry pin-to-pin was the only thing that worked. I saw the military struggle with this, too. No one had communications worth a damn” (Russell, 2005, p. A01).

Attribution of responsibility, while less present than human interest and conflict, occurred more often than the economic consequences and morality frames in coverage possibly because conflict over leadership, blame, and ignorance led to questions about which level of government or which particular government official was responsible for problems that arose in the aftermath of the hurricane. Levees broke. Thousands of evacuees were left behind for several days. While a natural disaster is unavoidable, proper crisis preparations and strategies might have helped in more positive coverage of government response. Martin and Boynton (2005) found that when government organizations face crisis, fast, effective communication and response leads to positive media coverage.

Economic consequences were less common in this study than Semetko and Valkenburg’s (2000) findings, placing the frame fourth instead of third in frame order. This difference might also be a result of coverage involving a natural disaster. While, economic concerns about insurance, property losses, and government financial aid were mentioned, human interest—saving lives and rescuing evacuees—dominated coverage. Furthermore, conflict and responsibility frames occurred more often possibly because of
the overwhelming and phenomenal aftermath and devastation from the hurricane. Government officials may not have known what to do, so instead they blamed one another and argued over responsibility. In addition, since this study analyzes only the first five weeks of coverage, it is possible that economic consequences were framed more often in later coverage as saving lives became less of an issue, and conflict settled down among officials.

Finally, like Semetko and Valkenburg (2000), morality frame occurred least often. While Hurricane Katrina was often mentioned as a disaster of “biblical proportions,” and many actions like looting were considered inappropriate, coverage of religion and social prescriptions was minimal in this study (Bumiller, 2005, p. A01). This may be because print media felt that the aforementioned common frames took precedence over religious tenets and social prescriptions. In addition, the fact that the morality frame is least common among the frames used lends the possibility that the shorter range of questions asked for each story, might have affected the outcome of this particular frame. More questions, or variables, within the study allow for more significant findings.

**Week-to-Week Framing Differences**

In most instances, including human interest frame, conflict frame, attribution of responsibility frame, and morality frame, the order of common frames significantly changed throughout the 5-week disaster coverage. Economic consequences frame changed somewhat throughout coverage, but not at a significant level. The most framing differences occurred between weeks 1 and 4 and weeks 1 and 5.

Between weeks 1 and 2, the human interest and conflict frames varied significantly. This may be because of the enormous amount of victims left stranded,
trapped, and dead in New Orleans. The Times Picayune reported one victim saying, “Daylight. That was the worst part…I couldn't believe what I was seeing. Dead bodies floating by. People who were blown off their roofs. Dead bodies and live snakes. I knew some of those dead people” (Finney, 2005, p. A17). While week 1 showed a significant presence of the human interest frame, print media coverage of human interest increased tremendously during week 2 as more and more coverage of failed government response was displayed. A report in The Times Picayune stated,

“If relief was in sight, it was not yet at hand. Thousands of men, women and children who fled impoverished neighborhoods flooded by Hurricane Katrina waited listlessly for relief at the threshold of death and despair at the Ernest N. Morial Convention Center. They said they had been without food and water until Friday. Corpses lay under blankets among them. One man in the shelter said he counted seven bodies as he waited over three days, and there were reports of violence” (Staff, 2005, A01).

The conflict frame showed significant differences between week 1 and 2, possibly because conflict was not as much of an issue within the first week after Hurricane Katrina as it competed with human interest frame. Government officials did not have time to play the blame game possibly because they were too busy planning rescue efforts. Moreover, officials were unable to speak with one another because communications were down, which may have also lessened room for the conflict frame. The Associated Press quoted Washington Parish President M.E. Taylor uttering, “Help is not coming to us. We’re on our own… adding the entire parish was without power and communications systems were completely down” (Deslatte, 2005). By week 2, however, media’s use of conflict frame dramatically increased. Government officials began discussing what went wrong, blaming one another, fighting over control, and even yelling on live radio. Postman (1985) suggested that to keep people interested in the news, the media have to make news
entertaining. Conflict is entertainment. *The Times Picayune* quoted Mayor Nagin and his frustration on the radio, yelling, “Don't tell me 40,000 people are coming here… They're not here. It's too doggone late. Now get off your asses and do something, and let's fix the biggest goddamn crisis in the history of this country” (*Times Picayune*, 2005, A14). As such, the media was quick to report on the mayor’s outburst probably because it made for exciting news.

Weeks 1 and 3 showed significant differences in the attribution of responsibility frame. Media’s use of the responsibility frame was minimal in week 1, perhaps because the media were so overwhelmed by the amount of unbelievable human interest stories, which may have resulted in minimal coverage of attribution of responsibility frame. Lack of communication may have been a factor of low coverage as well. Like the conflict frame, minimal coverage of week 1 shifted to amplified coverage in week 2 regarding the attribution of responsibility frame. And like the conflict frame, week 2 was a turning point of media coverage as media began charging responsibility to particular government officials. Such responsibility charges tended to link to conflict frame. For example, in *The Advocate*, Senator Mary Landrieu called Bush and the federal response staggering incompetence, and “scoffed at Bush's comments after the hurricane that no one could have predicted the city's levees breaking.” She said, “Everybody anticipated the breach of the levee, including computer simulations in which this administration participated” (Shields, 2005, 7-A).

Media’s use of attribution of responsibility frame lessened somewhat, but remained present in the third week of coverage. This may be because it was in this third week that both President Bush and Governor Blanco claimed responsibility for failures in
government response. The Associated Press reported Bush saying, “Katrina exposed serious problems in our response capability at all levels of government… And to the extent that the federal government didn't fully do its job right, I take responsibility” (Raum, 2005, AP). Two days later, Governor Blanco “acknowledged that mistakes were made in the initial response to Katrina. Blanco said, “The buck stops here… And as your governor, I take full responsibility” (Millhollon, 2005, 1-A).

Weeks 1 and 4 showed significant differences among the human interest, conflict, responsibility, and morality frames. By week 4, media’s use of the human interest frame had dropped dramatically. Such a decrease in this particular frame may be because rescue attempts off rooftops and at the Superdome and Convention Center had slowed or ceased. By September 23, twenty-five days after Hurricane Katrina ravaged New Orleans, rescuers reported finding only a few survivors in the past few days. After a slight drop in week 3, then a small increase in week 4, causing a significant difference between weeks 1 and 4, conflict frame remained consistent throughout the rest of this study’s coverage, possibly because the failed response led to Congress’ involvement to find out what went wrong and where. However, the conflict frame remained a factor among committee hearings. The Times Picayune reported that, “Michael Brown told a special House investigatory committee that a good deal of the problems in New Orleans can be attributed to the refusal of Gov. Kathleen Blanco and New Orleans Mayor Ray Nagin to order a mandatory evacuation until the day before Hurricane Katrina hit” (Alpert, 2005, A19). The attribution of responsibility frame diminished somewhat by week 4, possibly because it was overshadowed by media’s coverage of conflict frame. As seen in Senator Landrieu’s previous example, conflict frame was often present along with attribution of
responsibility frame. In fact, the largest difference between the two frames is found in week 3, when Bush and Blanco avoided conflict and took responsibility for their own actions. Morality frame differed significantly between weeks 1 and 4. By week 4, the morality frame had decreased significantly since week 1, possibly because in the early aftermath, many victims of Hurricane Katrina were reported as relying on God to get them through this disaster. For example, the *Times Picayune* quoted one victim who said, "I'm trusting God... I never thought it would be this bad" (*Times Picayune*, 2005, p. 8).

Similarly, many thanked God for being rescued, surviving, and having a place to go. For example, The Associated Press quoted a victim rescued from the Superdome who said, “If they're just taking us anywhere, just anywhere, I say praise God... Nothing could be worse than what we've been through” (Breed, 2005). By week 4, however, such statements about God and other religious tenets had decreased as extreme issues like flooding and death were replaced with FEMA complaints and economic concerns.

Weeks 1 and 5 showed significant differences among the human interest, conflict and attribution of responsibility frames. Like weeks 1 and 4, these three frames were used significantly less than they had been throughout week 1. In fact, the frames varied very little from what they had been in week 4. This may be because these were the more extreme frames that were covered early on after Hurricane Katrina. By week 5, such frames were replaced with more long-term concerns, or, they were simply used more consistently by the media.

Finally, the most significantly different frame throughout coverage was the human interest frame. As previously mentioned, its week-to-week changes included weeks 1 and 2, weeks 1 and 3, weeks 1 and 4, and weeks 1 and 5. In addition, significant
differences were evident among weeks 2 and 4, weeks 2 and 5, weeks 3 and 4, and weeks 3 and 5. Human interest was a major concern in week 2, possibly because rescue efforts were still happening. Therefore, the decline in later weeks were significant in weeks 2 and 3 just as they were in week 1. The human interest frame shifted the most among print media coverage as the demand for saving lives lessened throughout the five weeks.

While the economic consequences frame failed to show significant week-to-week differences, media’s use of this frame was evident throughout coverage. With minimal to medium early coverage, the economic consequences frame peaked during weeks 3 and 4. This may be due to media’s shift from human interest to economic concerns. By week 3, rescue attempts had slowed and economic consequences such as insurance, FEMA aid, hotel bills, unemployment and loss of business revenue had become a major concern among the public. The economic consequences frame, while not the most often used frame, was relatively consistent throughout the 5-week disaster coverage.

Media’s use of frames throughout disaster coverage shifts as the crisis persists. Particular issues receive more coverage, possibly as a reflection of what is happening to the public. While the human interest frame was not a major news interest by week 5, it was certainly the most important frame as stories of victims’ struggles occurred in week 2. Findings showed that the order of the common frames, except for the economic consequences frame, did change from week-to-week throughout disaster coverage. Iyengar (1991) differentiated between episodic and thematic frames. This is relevant here, because it is possible that the economic consequences frame was episodic, whereas the other frames were thematic. Episodic framing portrays public issues as events that are results of actions by individuals. Thematic framing, however, depicts regular problems in
society. Iyengar (1991) suggested that the type of media framing influences how the public attributes responsibility. Media’s use of episodic frames over thematic frames in the case of Hurricane Katrina might have meant that frames shifted from abstract societal causes to personal ones.

Media’s Use of Issue Attributes

Print media covered several issue attributes throughout Hurricane Katrina. The eight specific issue attributes examined here, in order from most to least, were relief/rescue, economic issues, negative timeliness, rebuild/repair, human concern, government promises, positive timeliness, and crime.

Relief and rescue was found to be the most common issue attribute in this study. Like the popular human interest frame, the rescue/relief issue attribute involved saving lives. The government’s first priority was the rescues of victims trapped throughout New Orleans. While rescue/relief coverage lessened somewhat as weeks passed, this issue attribute remained present throughout this study. This may be because of a constant need for relief. Hurricane Katrina victims faced many struggles including property damage and loss, insurance issues, unemployment, etc. The media suggested a need for victim relief when discussing such problems throughout the 5-week coverage.

The economic issue attribute was consistently present throughout overall disaster coverage. Hurricane Katrina’s devastation impacted and virtually stopped all activity in New Orleans, including small and big business, schooling, and even tourism. As soon as major rescue concerns slowed, victims began to worry about their financial situations. Such issues involved FEMA financial aid, loss of property, and insurance concerns. In fact, some stories centered around providing financial information such as this Times
Picayune story, which stated, “FEMA programs provide up to $26,200 per individual or household for housing and other needs. This includes up to $5,200 to make home repairs… The FEMA program also includes assistance for repairing or replacing an automobile” (Judice, 2005, p. A04). Media’s use of the economic issue attribute was considerable throughout overall coverage.

Negative timeliness was a popular issue attribute among disaster coverage as media were quick to judge and blame all levels of government for their slow response. As early as September 2, only three days after the hurricane made landfall, the Associated Press pointed out slow federal response stating, “Scorched by criticism about sluggish federal help, President Bush acknowledged the government’s failure to stop lawlessness and help desperate people in New Orleans” (Loven, 2005). He labeled the results unacceptable. In the same story, Massachusetts Governor Mitt Romney called the government’s slow response an embarrassment. It is possible that when people look back on the events of Hurricane Katrina, slow government response will be one of the first issues they remember.

Rebuild/repair was a somewhat common issue attribute among media coverage. This may be due to the large amount of coverage about the breached levees and repair efforts. Nationally, there was debate over whether New Orleans would rebuild at all. The Advocate quoted U.S. Speaker of the House Dennis Hastert in an interview about New Orleans saying, “It looks like a lot of that place could be bulldozed” (“Hastert pours salt,” 2005, p. 10). Most stories, however, involved repairing damages wrought by the hurricane, along with plans to rebuild. Most officials agreed that New Orleans must be rebuilt. The Associated Press quoted Senator John Breaux saying, “We don't suggest that
because San Francisco citizens live on top of an earthquake fault that they should be moved… The question of whether New Orleans should be rebuilt, one of the great cities of this country, is not really a question in my mind” (McGill, 2005). The media appeared to use the rebuild/repair issue attribute in an attempt to stir emotion and gain attention.

The second and less often covered half of the issue attributes began with human concern. While the human interest frame was most used among the five common frames, the human interest issue attribute fell short of such coverage. The human interest frame was used most often throughout disaster coverage, possibly because it was concerned with human examples, adjectives, and personal affects, whereas the human concern issue involved more specific concerns including health issues, death, and missing relatives. Only one question from the human concern issue index asked if there were human struggles or losses. As such, the human interest frame was more prevalent in the factor analysis than the human concern issue was in its issue attributes index. Had the questions been less specific, the human concern issue attribute may have been more common throughout media coverage.

The government promises issue attribute, which involved promises and absolutes by government officials, was less common among the analyzed issues. While there were several instances involving promises of relief and financial assistance, particularly from the federal government, the media seemed to pay closer attention to the government’s actions than its words. Regarding President Bush’s speech in Jackson Square, The Capital City Press mentioned the president offering a “long list of governmental actions designed to help the hurricane victims” (Witcover, 2005, p. 8). However, the final sentence of the story questioned the president’s promises, stating, “But it is the hurricane recovery that
will take the measure of the embattled president in the months ahead, as he strives to control the damage Katrina has inflicted on the Gulf Coast” (Witcover, 2005, p. 8).

The positive timeliness issue attribute was uncommon throughout overall disaster coverage. In comparison to the negative timeliness issue attribute, it is clear that the media chose to set the response agenda as slow and unsatisfactory, rather than fast or adequate. While initial coverage, including successful Coast Guard rescue efforts, were reported as fast and successful, almost all of the coverage left a negative tone of sluggishness by all levels of government. An example of this reversal in coverage is identified in a *Times Picayune* story when President Bush first recognized FEMA Director Michael Brown saying, “Brownie, you're doing a heck of a job” (Walsh, 2005, p. A01). Days later, however, after much federal criticism toward response, President Bush removed Michael Brown as FEMA director. The print media seemed to present the idea of timely response among early coverage, but then switched as situations worsened.

Results showed that the media covered the crime issue attribute the least. While looting, vandalism, and violence were present in media coverage, such issues may have been less talked about after order was reestablished in New Orleans. However, the fact that the crime issue attribute falls after the positive timeliness issue attribute in this analysis, lends the possibility that the range of questions, or the way in which they were asked might have affected this particular issue attribute.

The order of the prescribed issue attributes offers a multitude of information on how the media set the agenda for the public by using particular issues within a given situation or event. In the case of a natural disaster, the media made human issues like safety and financial struggles more of an issue than the government’s promises and
actions. This may be because the stories of the victims were so overwhelming and sensational that the media found them more interesting and important than the government’s words and actions.

**Week-to-Week Issue Attribute Differences**

The order of issue attributes significantly changed throughout the 5-week disaster coverage of Hurricane Katrina. Media’s use of the issue attributes, relief/rescue, negative timeliness, rebuild/repair, human concern, government promises, positive timeliness, and crime all differed significantly throughout coverage, with the exception of economic issues, which was somewhat consistent throughout coverage.

The media’s use of the relief/rescue issue attribute offered significant differences throughout the 5-week coverage. This issue was used significantly more between weeks 1 and 2. This is possibly because rescue and relief efforts occurred most during the first two weeks as victims were trapped in attics and on rooftops, and throughout the city. Week 2 and 3, however, offered opposite findings, depicting a significant decline in coverage. By week 3, it is fair to say that such rescue and relief needs had decreased. By week 5, rescue and relief coverage was minimal, as new problems such as economic concerns, and rebuilding plans became more relevant to the media.

The media’s use of the economic issue attribute did not offer significant differences from week-to-week. Like the economic consequences frame, it remained fairly consistent throughout the five weeks analyzed. As such, like the economic consequences frame, the economic issue attribute was generally present within weeks 3 and 4 of disaster coverage. This is perhaps because human concerns shifted to economic concerns. There was less of a need for rescuers, but more concern about personal
economic futures. The economic issue attribute, while not the most often used issue attribute, was relatively consistent throughout the 5-week disaster coverage, with minimal peaks at weeks 3 and 4.

The media’s use of the negative timeliness issue attribute, which identified negative timely government response throughout coverage, showed significant differences in week-to-week disaster coverage. Week 1 shifted increasingly to week 2, perhaps because negative time, specifically the slow response, had become such a major issue among media. Week 2 consisted of Michael Brown stepping down as FEMA Director, President Bush promising thorough investigations into slow response, and President Bush visiting New Orleans after being criticized for slow federal response. Such topics centered on negative response, with each article finding ways to mention slow government response. The Associated Press, with regard to Brown stated, “Brown has been under fire and facing calls for his resignation because of the administration’s slow response to the magnitude of the hurricane” (Jordan, 2005). Moreover, concerning President Bush’s thorough investigation, the Associated Press stated, “State as well as federal officials are facing public criticism for a slow response to the crisis” (Lester, 2005). Finally, in relation to the Bush visits, the Associated Press stated, “President Bush is spending much of his time these days on relief efforts for victims of Hurricane Katrina after his administration was harshly criticized for an initial response to the storm called slow and inadequate.” Weeks 3 and 4 offered a significant decline in coverage of the negative timeliness issue attribute. This may be because of the events within week 4, such as Hurricane Rita and economic issues like temporary and permanent housing, insurance,
and FEMA aid. Overall, the media’s use of the negative timeliness issue attribute throughout the 5-week coverage showed significant differences.

The media’s use of the rebuild/repair issue attribute offered several significant changes throughout the 5-week coverage. While week 1 to week 2 showed a minimal increase in coverage, week 2 to week 3 illustrated a remarkable increase. This may be because more and more evacuees were returning to New Orleans to find their homes and businesses flooded, rooftops damaged, and debris throughout the area. Hurricane Katrina victims, however, optimistically and quickly developed plans to rebuild and repair. For example, The Advocate stated that, “In the weeks to come, tourism officials will be developing strategic plans to rebuild the industry in New Orleans” (Campbell, 2005, 14). In addition, the Associated Press reported that a $30.9 million fast-track contract was signed to rebuild the Interstate 10 “Twin Span” bridge over Lake Pontchartrain. Such repairs, according to Governor Blanco, were an attempt to help Louisiana citizens get back to normal. While the media’s use of the rebuild/repair issue attribute persisted throughout the five weeks, week 3 to week 5 showed a significant decline in disaster coverage. This may be because the need for major repairs like levees and bridges had made steady progress, therefore the media may have chosen to cover those particular issues less.

Media’s use of the human concern issue attribute significantly varied throughout the 5-week coverage of Hurricane Katrina. From week 1 to 2, media’s use of the human concern issue attribute dramatically increased. This is possibly because, much like the human interest frame, the media covered issues involving people—their struggles, losses, death, and despair—throughout week 2. For example, displaced students found
themselves lost among strangers in a new school. The President of the Chamber of Greater Baton Rouge, Stephen Moret said that one-third of New Orleans’ 34,000 businesses were likely displaced. And when victims were not thinking of their businesses, they were concerning themselves with finding housing. Media’s use of the human concern issue attribute considerably declined after week 2, perhaps because other issues became more important to the media.

The media’s use of the government promises issue attribute offered some significant differences. The media’s use of the government promises issue attribute significantly declined from week 2 to week 4, perhaps because between week 2 and 3, government officials were making promises and offering absolutes. For example, the *Times Picayune* quoted President Bush promising, “the resources and resolve of his administration to rebuild and revitalize the New Orleans region and Mississippi Gulf Coast, even to improve health care and education and to confront the causes of poverty - in all, to "do what it takes ... stay as long as it takes” (Maginnis, 2005, p. B09). In addition, *The Advocate* reported Governor Blanco giving an absolute, saying, “To anyone who even suggests that this great city should not be rebuilt, hear this and hear it well, 'We will rebuild” (Millhollon, 2005, 1-A). By week 4, the government was expected to take action on the promises and absolutes. Two and three weeks after Hurricane Katrina devastated New Orleans, it is possible that the government worked to lift spirits with their promises of a bigger and better city. But by week 4, promises had declined in coverage, possibly meaning that the government had begun work to follow through with said promises.
The media’s use of the positive timeliness issue attribute, which identified positive timely government response throughout coverage offered significant week-to-week differences. Throughout the first four weeks of, the positive timeliness issue attribute decreased among media coverage. Weeks 1 and 4 show a significant decline in media coverage, possibly because as early coverage presented a positive timely response, or at least adequate efforts, later coverage showed that the government was criticized for its slow response. Earlier coverage from “We just have horrible conditions to deal with… They are moving things into the city - diesel fuel, water, ice, food, etc. - as fast as they can” (Alpert, 2005, p. 10). As the weeks progressed, however, one was more likely to find phrases like “the slow and muddled government response to the Aug. 29 hurricane that swamped New Orleans” in the *Times Picayune* (Walsh, 2005, p. A02). The media’s use of the positive timeliness issue attribute was used more among early coverage than later coverage.

Media’s use of the crime issue attribute showed noteworthy differences throughout the 5-week coverage. While week 1 to week 2 showed a slight increase, it was not significant. However, the minor increase may be because of the efforts by government and police to control looting. For example, the *Times Picayune* quoted Governor Blanco saying, "We will do what it takes to restore law and order… We will not put up with petty criminals doing their business. We want to take these people off the streets” (Anderson, Perlstein, & Scott, 2005, p. 5). Beginning somewhat low in week 1, media’s use of the crime issue attribute dropped significantly by week 3. The significant decline in coverage of crime from week 2 to week 3 may be a result of an evacuated city. By week 3 of Hurricane Katrina aftermath, most of the victims had been removed from
Media’s use of issue attributes throughout disaster coverage shifts as the crisis persists. Particular issues receive more coverage, possibly as a reflection of what is happening to the public. Here, the media seemed to pay closer attention to the victims of Katrina in early coverage. But as rescue efforts diminished, more of a focus was put on rebuilding and repairing efforts, economic issues, and the government’s slow and untimely response. In addition, it is necessary to mention that week 2 had the greatest number of statistically significant differences among the five weeks analyzed, perhaps because the relief/rescue issue attribute was being replaced with other issues such as economic issues and slow response coverage. Findings showed that the order of the issue attributes, except for the economic issue attribute, did change from week-to-week throughout disaster coverage.

Media’s Use of Tone

The overall tone of newspapers offered a moderately neutral description of government response. Tone of federal government response was slightly more positive than negative. Tone of state government response, however, was slightly more negative than neutral. Similarly, tone of local government response was more negative than
neutral. Overall, tone of federal government response was more positive than the state and local levels. Tone of local government response was more negative than the federal and state levels. This may be for several reasons. First, while President Bush is commander in chief of the United States, Hurricane Katrina did not affect the entire United States in the same way that it affected the Gulf Coast. While the country may have seen slight economic differences or population increases, it was not devastated by floodwaters, winds, debris, crime, loss of property, or loss of life. Therefore, all eyes were on the Gulf Coast region, particularly Mayor Nagin, as the city of New Orleans filled up like a bowl when the levees broke. Communication problems made it impossible for Mayor Nagin to effectively communicate with government officials. It is possible that because the media could not find Mayor Nagin, they assumed he was avoiding them. A second possibility stems from the first, that negative local media coverage grew and passed throughout the U.S., thereby portraying Mayor Nagin in a negative light. National coverage, initially developed by local media, may have influenced Tim Russert of NBC-TV’s “Meet the Press.” According to the Times Picayune, Russert grilled Nagin “over his failure to order a mandatory evacuation of New Orleans on the Friday before Katrina's arrival, coinciding with Bush's advance declaration of an emergency, while public transit and school buses were still available for use to transport evacuees” (Thibodeaux, 2005, A01). A third consideration was the effect of Mayor Nagin’s outburst over a telephone interview, which was played over television and radio broadcast. Mayor Nagin blasted federal and state response arguing, “Get off your ass and get down here to fix the biggest goddamn disaster in the nation's history” (Shields, 2005, 19-B). As such, his message created conflict among media, with President Bush, and with Governor Blanco. Nagin
was not the only local official who made memorable mistakes, however. A fourth possibility involved help from Parish President Aaron Broussard who ordered that the Metairie pumping stations be evacuated, resulting in thousands of flooded homes. Finally, overall tone from media coverage was somewhat neutral, perhaps because all levels of government had to deal with a major natural disaster that put lives in danger. Similarly, floodwaters made it difficult for media to get into the city, possibly hindering potential negative stories.

While there was little variance among positive, neutral, and negative tone, one consistent finding among federal, state, and local response revealed the active/passive descriptor as the most positive descriptor. While all levels of government received severe criticism for a failed response to Hurricane Katrina recovery, the media reported that efforts were constantly being made to improve situations. A considerable amount of stories mentioned slow response, then turned the issue to government actions. For example, a story from the Times Picayune began by stating, “President Bush and congressional leaders promised Tuesday to investigate why the initial federal response to the devastation of Hurricane Katrina was, by wide agreement, slow and inadequate” (Alpert, 2005, A10). However, the majority of the rest of the story centered around federal actions being taken, which included readying a $40 billion aid package, plans to help school districts throughout the country that are taking in displaced students, working with Cabinet members to develop an immediate, long-term housing plan for about 1 million displaced hurricane victims, and making efforts to ensure that victims are able to collect Social Security checks and other benefits no matter where they are living. While media coverage of government response was considered slow, media’s tone was more
neutral than negative, possibly because the positive, active descriptor was so common in the stories analyzed.

The most common negative descriptor involving tone of federal and state government response was the fast/slow descriptor. In other words, the most negative descriptor illustrated that federal and state response was slow. Considering that the media constantly covered slow federal response, such findings are no surprise. Separately, media’s tone of local response resulted in the successful/unsuccessful descriptor as the most negative used descriptor among local response. The media labeled local government as primarily unsuccessful. Such findings are understandable given the situations that went terribly wrong from days before the storm and long after. From the mayor’s issues involving flooded empty buses that could have transported citizens out of the city, to his outburst against state and federal government over television and radio broadcast, the media portrayed Mayor Nagin’s actions as failures.

**Week-to-Week Tone Differences**

The media’s tone of federal, state, and local government response did not differ significantly from week-to-week. However, tone of federal response was more positive than negative in the second week of coverage than other weeks. This slight difference may be because harsher criticisms developed after week 2. President Bush claimed full responsibility for the failed response, thereby leaving the media with much to talk about.

At the state level, tone of response, depicted closely to neutral, was more negative than positive. Week 5 was the state government’s most positive week. This may be due to a shift in the blame game to a focus on recovery. For example, Governor Blanco suggested moving forward, not backward when she appeared before the Senate Finance Committee.
In her opening statement, she made no mention of former FEMA Director Michael Brown’s negative allegations of inappropriate state response. Instead, Governor Blanco focused on the rebuilding effort. Local government was portrayed consistently, slightly more negatively that federal and state governments throughout the 5-week coverage. Week 4 suggests that as local government was portrayed more positively, federal and state governments were seen as more negative. This may be because FEMA seemed like more of a problem than a solution, which might have lead to a negative view of the Bush administration. Local response might have been less negative during week 4 because of Hurricane Rita, which made landfall near the Louisiana-Texas line less than a month after the devastation of Hurricane Katrina. In addition, national papers may be more familiar with government bureaucracy, and therefore, less likely to see response as slow compared to local reporters, living the experiences. Findings do not offer significant week-to-week differences of media’s tone toward federal, state, and local government response, which shows that media’s tone of government response during a disaster, is relatively unwavering and somewhat consistent.

Chapter 6 Conclusion
In the case of a natural disaster, media play a key role in providing information to the public, specifically regarding government response. It is necessary here to understand media’s use of framing, issue attribute agenda setting, and tone in their delivery of crisis news because such tools as frames, issue attributes, and use of tone may automatically interpret news for the public. This study offers more insight into the media’s role during a natural disaster, suggesting that they use tools to present government response in a particular manner. Finally, it brings awareness that the media set the agenda, meaning they choose what frames and issues deserve more or less coverage, and how the government is responding to the public’s needs.

The media consciously and unconsciously frame and set the agenda of news. Disaster coverage of media, particularly hurricane coverage, is different from regular news coverage because it involves unwarranted and sudden devastation including property loss, overwhelming uncertainty, and loss of life. This study’s new, suggested order, which placed human interest frame above attribution of responsibility frame and conflict frame illustrates the effects that disaster coverage has on the media agenda.

This study’s examination of how the media demonstrate the tone in which the public views information offered interesting outcomes. While overall tone of response was generally neutral, federal response was considered slightly more positive than state and local response. Local response, receiving slightly more negative coverage than federal and state response, was depicted by the media as unsuccessful.

Such findings lend meaning that the media, even in the case of a natural disaster, accurately report news, offering very little bias. Considering the government’s many failures in response to the hurricane, the media’s neutral coverage shows that the media--
while telling us what to think and what to think about—ultimately allow the public to form its own positive, neutral, or negative opinion.

Limitations

While this study offered a wealth of information of how the media portrayed government response to Hurricane Katrina, there were some limitations. This study limited itself to print media. In the case of a natural disaster, visuals play a central role in media coverage because they have the ability to capture a picture of devastation, fear, and utter shock more so than the most descriptive words. In addition, Internet and television images might have been used just as much as print coverage, if not more throughout the hurricane’s aftermath, since the devastation was so visually extraordinary. Moreover, it is important to recognize that coverage of particular officials was not equal and that stories included many different individuals that made up each level of government analyzed. Therefore, the tone of response may be limited, since it is based on specific characters from each level of government in some stories, and a number of characters in other stories.

The four newspapers used in this analysis were uneven with *The Times Picayune* making up the most stories \((n = 296)\) in the sample, whereas *The Washington Post* had the least amount of stories \((n = 56)\). As such, this may have affected results. In addition, results of tone offered insignificant findings. A larger interval scale may have allowed for more variation among the descriptors.

Future Research
Results of this study produced interesting avenues for future research. Future studies should involve analyses of both visual and printed products, and television coverage. In addition, with crisis communication somewhat mentioned in this study, it would be interesting to examine and compare each level of government’s crisis communications plans to find whether their preparedness or lack of preparedness was a direct result of media’s tone of response. Moreover, with regard to tone, it might be advantageous to use a 5-interval scale instead of a 3-interval scale when examining the descriptors from this study. Such a scale might result in findings that are more detailed. Furthermore, with regard to framing and attribute agenda setting, it would be helpful to know whether the ordered frames and issue attributes directly influenced public opinion. Finally, the officials and other representatives within the federal, state, and local governments played different roles inside their own levels, and each leader’s individual response affected the outcome of this study. For example, while President Bush faced some harsh criticisms, General Honore was consistently portrayed as a hero figure. Such differences affected tone of government response. In addition, Mayor Nagin, a major representative of the local government, was often used throughout coverage. While other local officials like parish presidents, school board officials, and police officers were covered, Mayor Nagin and his response received the majority of coverage of local response. Therefore, future research might include a breakdown and comparison of the individual officials and leaders within the three levels of government to examine how each person affected changes throughout response. By analyzing and comparing the data from this study, along with the public’s ordered frames and issue attributes, the media’s
influence and agenda may or may not effect how the public understands and internalizes information.
References


Russell, G. (2005, September 11). Nagin: Mistakes were made at all levels; His biggest frustration was slow pace of relief. *The Times Picayune*, pp. A01.


Scott, R. T. (2005, September 1). We will do what it takes to restore law and order; Forces called in to curb widespread looting. *The Times Picayune*, pp. 5.


Appendix A: Code Book
Unit of Analysis: The unit of analysis is the Lexis Nexis retrieved newspaper article. Only items written by staff or official columnists are coded; do not code letters to the editor or editorials.

Items selected discuss government response to Hurricane Katrina.

Read through the entire article, then code that item using the printed coding sheet.

---

Item ID Number (1.00): write in the name of the file (Ex: 0827-the approaching storm).
Coder (1.00): select your name to indicate that you are the one coding the item.
Date (1.00): Indicate the date that the story was printed. Use a four digit code: August 27 is 0827.

---

FRAMES

Attribution of Responsibility Frame
Does the story suggest that some level of government has the ability to alleviate the problem? (.76) Can some level of government, in some way, make things better? For instance, President Bush is sending National guardsmen to stop criminal acts.

Does the story suggest that some level of the government is responsible for the issue/problem? (.79) Does the story blame either the federal, state, or local government for any aspect involving the crisis? For example, Federal and state governments knew that the levees could only withstand a Category 3 hurricane.

Does the story suggest solution(s) to the problem/issue? (.80) Can something be done to ease or fix the situation? For example, helicopters dropped sandbags to fill the levee breaches as a temporary fix.

Does the story suggest that an individual or group is responsible for the issue/problem? (.79) Does the story blame either one level of government or a particular government official for any aspect of the crisis? For instance, the local government (or Mayor Nagin) failed to have a proper evacuation plan in place.

Does the story suggest the problem requires urgent action? (.77) Is there a need for the problem/issue to be solved right away? For example, Dome evacuees have no food or water, or, Snipers are shooting at police and National Guardsmen.

Human Interest Frame
Does the story provide a human example or “human face” on the issue? (.80) Does the story give an example of at least one person’s situation or story? For example, Ann Smith has been looking for her mother since Monday and daughter since Monday.

Does the story employ adjectives or personal vignettes that generate feelings of outrage, empathy-caring, sympathy or compassion? (.77) Does the writer descriptively word the story in such a way as to spark the readers’ emotion? Or, does it use personal stories to spark readers’ emotion? For instance, the parish president said “We are ripped. We are torn. We are shredded. But we’re still Americans. Send us all you can and restore this community like you would restore this flag.”

Does the story emphasize how individuals and groups are affected by the issue/problem? (.69) Does the story stress/accentuate how citizens will have to adjust to what has happened? For example, many school children dispersed among schools throughout the country.
Does the story go into the personal or private lives of the actors? (.78) Does it discuss a particular person’s story? For example, a story might portray all of the issues or problems that happened to a particular person throughout the storm, including his/her home being flooded, or concerns about relatives that have not yet been found or contacted.

Does the story contain visual information that might generate feelings of outrage, empathy-caring, sympathy or compassion? (.78) Does the story use description or metaphors to paint a picture in order to create emotion? For example, the parish president said, “from here, hell doesn’t look so bad.”

**Conflict frame**

Does the story reflect disagreement between parties/individuals-groups-countries? (.84) Does it suggest that individuals or groups differ in opinion? For example, President Bush suggested that he take control of the National Guard, while Governor Blanco refused to allow it.

Does one party-individual-group-county criticize another? (.78) Does any person/group criticize any other person/group else in the story? For instance, Mary Landrieu said that the federal government was too slow in its response and rescue efforts.

Does the story refer to two sides or to more than two sides of the problem or issue? (.76) Does the story offer different opinions in response to the hurricane? For example, state and federal officials dealt with contentious negotiations and apparent miscommunication between the two sides as they tried to cope with the disaster.

Does the story refer to winners and losers? (.82) Is one individual or group coping or responding better than another to the disaster? For example, Nagin’s decision to remain in New Orleans hurt him when he could not properly communicate with the state and federal governments. He made promises that buses and supplies were coming when they actually were not.

**Morality frame**

Does the story contain any moral message? (.78) Does it express values or ethical issues? For example, stories about rumors spread that police were looting, which brought about ethical concerns.

Does the story make reference to morality, God and other religious tenets? (.80) Does the story literally mention moral messages, God, or prayer? For example, people thanked God for finally being rescued from the Superdome.

Does the story offer specific social prescriptions about how to behave? (.76) Does it instruct or recommend the reader to conduct him/herself in a particular manner? For example, public officials suggested that residents wait to return to their homes, and further asked them to drive cautiously upon returning.

**Economic consequences frame**

Is there a mention of financial losses or gains now or in the future? (.80) Does the story make any reference to money or financial concerns in the present or future? For example, the mayor said, “the city is bankrupt ... We have no money.”

Is there a mention of the cost/degree of expense involved? (.79) Does the story suggest actual amounts of money that are either needed or being sent? For example President Bush promises that Congress has provided, more than $60 billion.

Is there a reference to economic consequences of pursuing or not pursuing a course of action? (.83) Does the story mention costs or financial penalties to repairing/rebuilding or not repairing/rebuilding? For instance, as the cleanup process proceeds, all aspects of the city will need to be restored, a multifaceted and costly task.

**TOPICS**

**Relief/rescue**

Does the story provide an example of relief/rescue efforts? (.78) Does it mention anything about the anyone saving lives, supplying food or shelter, or any other type of relief or rescue? For example, The National Guard was called in to help in search and rescue and to evacuate the city.
Does the story suggest the need for relief/rescue efforts? (.85) Does it imply or hint at people needing any type of help, including being rescued from rooftops or simply receiving supplies or shelter? For example, some stories used quotes from evacuees to describe the need for help like, “I can't afford to get out of here. But I have to feed my family.”

Does the story mention relief/rescue attempts or failures? (.81) Does it actually describe a story of someone trying to help out someone else? Or does the story discuss a failed attempt to help someone? For example, there were just not enough rescuers to save all of the people trapped in New Orleans. People suffered and died waiting to be rescued.

Rebuilding/repair

Does the story mention plans to rebuild/repair? (.76) Does it discuss strategies or procedures to fix what the hurricane destroyed, or to restore pieces and parts of the city? For example, “One of the most immediate tasks after Hurricane Katrina hit was repair of the breaches in the New Orleans levees.”

Does the story mention present rebuilding/repairing? (.77) Does it mention that actions are already being taken to rebuild/repair the city? For example, several contracts were signed and bills were passed to start repairing and rebuilding efforts.

Does the story suggest that some organization, group, or institution is making efforts to rebuild/repair? (.82) Does it mention whether a particular group is currently working to restore aspects of the city? For example, the Army Corps of Engineers was driving the draining effort to get water out of the city.

Does the story mention whether citizens will permanently return to New Orleans to rebuild/repair? (.79) Does it discuss where residents will either go back to New Orleans or move away? For instance, many New Orleanians vowed not to return, claiming they were happier in other states and away from hurricanes.

Does the story mention whether New Orleans should or should not be rebuilt/repairied? (.77) Does it offer any implications of restoring and refurbishing or NOT restoring and refurbishing the city? For example, one public official questioned whether New Orleans should be bulldozed.

Timeliness (Negative)

Does the story mention the need for timely response? (.85) Does it suggest the significance of a timely response? Or does it offer what a timely response might have been? For example, some stories about trapped residents and Superdome evacuees imply the need for timely response as a life or death circumstance, and that they need to be rescued NOW.

Does the story mention either lack of timeliness of government response? (.84) Does the story offer an example of a lack of timeliness by any level(s) of government? For instance, many stories suggest that the federal government was sluggish in its response to the disaster.

Does the story suggest how slowly any type of reaction or response occurred? (.76) Does it discuss the slow pace at which any type of response occurred? For example, FEMA was considered slow by many in its response.

Timeliness (Positive)

Does the story mention that timely response from any form of government occurred? (.77) Does it acknowledge government's timely response at all? For example, Blanco acknowledged that hundreds of lives were saved today by our National Guard.

Does the story suggest that the timeliness of government response was adequate? (.73) Does it praise government for timely response in any way, or mention that they did the best they could? For example, given the amount of flooding, many people were rescued.

Does the story suggest how quickly any type of reaction or response occurred? (.67) Does it discuss the fast pace at which any type of response occurred? For example, the Coast Guard was quick to begin rescue attempts after the hurricane had passed.

Government Promises
Does the story mention any level of government making promises? (.87) Do any of the three levels of government use promises, guarantees, or assurances in any of their talks and/or speeches? For example, one story said, Bush came bearing promises of a “better tomorrow.”

Does the story mention absolutes made by government or public officials? (.85) Does it quote or describe government officials’ positive and/or unconditional statements? For example, a government official says, “There is no doubt that New Orleans will be rebuilt.”

Does the story mention a positive and optimistic future? (.79) Does it suggest that things will get better for New Orleans, or that the city will recover from this devastation? For example, one story quoted Mayor Nagin saying, “We will build a better New Orleans... We’ve secured the city, and you’re in a better place while we start to build the new New Orleans.”

Does the story suggest broken promises? (.79) Does it imply that promises were not met, or that they were met, but not in a timely manner? For example, Governor Blanco promised Mayor Nagin that buses were coming, but they did not arrive in New Orleans until several days later.

**Economy**

Does the story mention loss of property? (.80) Does it mention any damages to homes buildings, or cars, including flood, wind, rain or looting damage? For example, while some residents were glad to learn of no flooding damages, they still dealt with looting.

Does the story mention insurance issues? (.83) Does it discuss anything involving insurance concerns or problems? For example, as soon as the storm had passed, broadcast media were offering tips on how to obtain flood insurance money.

Does the story mention costs to rebuild? (.85) Does it discuss expenses needed to fix what the hurricane destroyed? For example, one story suggested that the estimated cost over 10 years of rebuilding was $82 billion.

Does the story mention any level of government financial support? (.79) Does a particular level of government offer financial support as relief to either an individual, group, or community? For example, Bush offers federal support to Louisiana.

Does the story mention loss of jobs or unemployment caused by the hurricane? (.74) Does it discuss any employment losses? For example, many residents have not yet returned to the city, causing a surplus in hospital employees, thus forcing hospitals to cut staff.

Does the story mention loss of private business revenue (casinos, stores, etc.)? (.75) Does it discuss private business’ financial concerns from a damaged business or decreased population? For example, many stores are suffering from a lack of both customers and employees.

**Human concern**

Does the story mention health issues? (.79) Does it discuss and health concerns or possible health risks? For example, since the city had flooded, it was unsafe to drink tap water without first boiling it.

Does the story mention dying or deceased victims? (.77) Does it discuss people either dying or already dead as a result of the hurricane? For example, one story described a family’s attempt to salvage their mother’s body by putting her into a refrigerator until the storm was over. “We put her body in a refrigerator and floated it out the door so we would be able to find her when the hurricane was over.”

Does the story mention missing or lost relatives/friends? (.75) Does it discuss the lost and missing family members and friends of Hurricane Katrina? For example, many people—children, adults, teenagers and senior citizens—went missing for several days and even weeks after the hurricane.

Does the story tell of Katrina victims’ struggles/losses? (.80) Does it describe particularly difficult accounts of what Katrina victims endured? For example, Mayor Nagin said that one woman had just had a miscarriage, but could not step out of line to clean herself off because she needed to get on the bus.

Does the story mention a positive personal outcome due to the hurricane? (.96) Does it mention that something good happened to some individual, group, or organization as a result of the hurricane and related events? For example, after the hurricane flooded thousands of homes, some families may have made money from insurance companies.
Crime
Does the story mention acts of violence/crime? (.81) Does it suggest any criminal acts by anyone? For example, looting became a major problem throughout New Orleans as rescuers worked to evacuate the city.

Does the story mention police/government efforts to resolve crime issues/problems? (.77) Does it discuss any levels of government attempts to fight violent or criminal acts? For example, the National Guard was sent in to round up snipers that had been shooting at rescuers and relief workers.

Does the story mention a need for police? (.83) Does the story imply that police are in demand? For example, only a small percent of New Orleans police remained in the city, while the others fled.

TONE
Code tone for each level of government using this 3-point interval scale: (1) positive, (2) neutral, and (3) negative.

Successful/Unsuccessful (federal, .78; state, .80; local, .76) - Using the 3-point interval scale, determine how successful, victorious, or thriving each level of government response was in response to Hurricane Katrina.

Fast/Slow (federal, .74; state, .79; local, .75) - Using the 3-point interval scale, determine how fast or slow, prompt or sluggish each level of government was in response to Hurricane Katrina.

Efficient/Inefficient (federal, .81; state, .84; local, .79) - Using the 3-point interval scale, determine the efficiency (competence or effectiveness) each level of government was in response to Hurricane Katrina.

Encouraging/Discouraging (federal, .88; state, .80; local, .75) - Using the 3-point interval scale, determine how encouraging or discouraging, supportive or disappointing each level of government was in response to Hurricane Katrina.

Intelligent/Unintelligent (federal, .71; state, .86; local, .74) - Using the 3-point interval scale, determine the intelligence (aptitude or cleverness) each level of government was in response to Hurricane Katrina.

Appropriate/Inappropriate (federal, .80; state, .79; local, .78) - Using the 3-point interval scale, determine how appropriate or inappropriate, proper or improper each level of government was in response to Hurricane Katrina.

Prepared/Unprepared (federal, .80; state, .77; local, .83) - Using the 3-point interval scale, determine the preparedness (awareness or attentiveness) each level of government was in response to Hurricane Katrina.

Reliable/Unreliable (federal, .84; state, .79; local, .81) - Using the 3-point interval scale, determine the reliability (dependability or trustworthiness) each level of government was in response to Hurricane Katrina.

Active/Passive (federal, .76; state, .70; local, .78) - Using the 3-point interval scale, determine how active or passive, dynamic or submissive each level of government was in response to Hurricane Katrina.

Hopeful/Doubtful (federal, .88; state, .77; local, .79) - Using 3-point interval scale, determine how confident, expectant or hesitant, cynical each level of government was in response to Hurricane Katrina.
Appendix B: Code Sheet

ID # ______________________________
Coder ______________________________
Date: ___________ (4 digit code: August 27 is 0827)

Frames: mark each question as yes (1) or no (0).

Attribution of Responsibility

- Does the story suggest that some level of government has the ability to alleviate the problem?
- Does the story suggest that some level of the government is responsible for the issue/problem?
- Does the story suggest solution(s) to the problem/issue?
- Does the story suggest that an individual or group is responsible for the issue/problem?
- Does the story suggest the problem requires urgent action?

Human Interest frame

- Does the story provide a human example or “human face” on the issue?
- Does the story employ adjectives or personal vignettes that generate feelings of outrage, empathy-caring, sympathy or compassion?
- Does the story emphasize how individuals and groups are affected by the issue/problem?
- Does the story go into the personal or private lives of the actors?
- Does the story contain visual information that might generate feelings of outrage, empathy-caring, sympathy or compassion?

Conflict frame

- Does the story reflect disagreement between parties/individuals-groups-countries?
- Does one party-individual-group-county criticize another?
- Does the story refer to two sides or to more than two sides of the problem or issue?
- Does the story refer to winners and losers?

Morality frame

- Does the story contain any moral message?
- Does the story make reference to morality, God and other religious tenets?
- Does the story offer specific social prescriptions about how to behave?

Economic consequences frame

- Is there a mention of financial losses or gains now or in the future?
- Is there a mention of the cost/degree of expense involved?
- Is there a reference to economic consequences of pursuing or not pursuing a course of action?

Topics:

Relief/rescue

- Does the story provide an example of relief/rescue efforts?
- Does the story suggest the need for relief/rescue efforts?
- Does the story mention relief/rescue attempts or failures?
- Does the story mention that rescue attempts are going well, or do they highlight a positive rescue story?

Rebuilding/repair

- Does the story mention plans to rebuild/repair?
- Does the story mention present rebuilding/repairing?
- Does the story suggest that some organization, group, or institution is making efforts to rebuild/repair?
- Does the story mention whether citizens will permanently return to New Orleans to rebuild/repair?
Does the story mention whether New Orleans should or should not be rebuilt/repaired?

Timeliness (Negative)
____ Does the story mention the need for timely response?
____ Does the story mention either lack of timeliness of government response?
____ Does the story suggest how slowly any type of reaction or response occurred?

Timeliness (Positive)
____ Does the story mention that timely response from any form of government occurred?
____ Does the story suggest that the government response was adequate?
____ Does the story suggest how quickly any type of reaction or response occurred?

Government Promises
____ Does the story mention any level of government making promises?
____ Does the story mention absolutes made by government or public officials?
____ Does the story mention a positive and optimistic future?
____ Does the story suggest broken promises?

Economy
____ Does the story mention loss of property?
____ Does the story mention insurance issues?
____ Does the story mention costs to rebuild?
____ Does the story mention any level of government financial support?
____ Does the story mention loss of jobs or unemployment caused by the hurricane?
____ Does the story mention loss of private business revenue (casinos, stores, etc.)?

Human concern
____ Does the story mention health issues?
____ Does the story mention dying or deceased victims?
____ Does the story mention missing or lost relatives/friends?
____ Does the story tell of Katrina victims’ struggles/losses?
____ Does the story mention a positive personal outcome due to the hurricane?

Crime
____ Does the coverage mention acts of violence/crime?
____ Does the coverage mention police/government efforts to resolve crime issues/problems?
____ Does the coverage mention a need for police?

<table>
<thead>
<tr>
<th>Tone</th>
<th>1) Positive</th>
<th>2) Neutral</th>
<th>3) Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Government</td>
<td>1) Successful</td>
<td>2) neutral</td>
<td>3) unsuccessful</td>
</tr>
<tr>
<td></td>
<td>1) Fast</td>
<td>2) neutral</td>
<td>3) slow</td>
</tr>
<tr>
<td></td>
<td>1) Efficient</td>
<td>2) neutral</td>
<td>3) inefficient</td>
</tr>
<tr>
<td></td>
<td>1) Encouraging</td>
<td>2) neutral</td>
<td>3) discouraging</td>
</tr>
</tbody>
</table>
Vita

Brigette Lynn Brunken is from Metairie, Louisiana. She received her Bachelor of Arts in Mass Communication from Louisiana State University in 2004. Throughout her
years as an undergrad, she was a member of the Louisiana State University “Golden
Band From Tigerland,” Zeta Tau Alpha Sorority, and Sigma Alpha Iota Music Fraternity.
Not quite ready for the real world, and wanting to prolong her time in college as long as
possible, she applied to the Manship School’s graduate program and was accepted in the
Spring semester of 2005. She received her master’s degree in only three semesters and a
summer session.

Her research interest of media’s influence on news, along with her personal
dealings with the devastation wrought by Hurricane Katrina, led her to examine the
media’s portrayal of government response after a natural disaster. After graduation, she
plans to pursue a career in public relations.