

**Using Actor Network Theory to Analyze the Federal Emergency Management Agency's
Failure after Hurricane Katrina in 2005**

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On my honor as a University Student, I have neither given nor received unauthorized aid on this
assignment as defined by the Honor Guidelines for Thesis-Related Assignments

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Introduction

Triage processes are assessing the level of care needed for a patient under a quick assessment. The triage process is essential so that the collective of patients can receive the best care without missing any individual. During natural disasters hospitals and government officials react to situations under the same premise as triaging patients. In 2005, hurricane Katrina hit New Orleans, and over a thousand people died as a result from the flooding, destruction, and lack of access to resources- it is estimated that billions of US dollars were lost in damages (Jonkman et al., 2009, p. 676). Hurricane Katrina is considered the worst hurricane for all of the twenty-first century as of 2025, hurricanes are assessed on their severity based on the damage and financial cost for recovery. Three main public sectors were devastated for New Orleans, housing, medical facilities, and education. For the purposes of this paper, I will narrow my focus to medical facilities within New Orleans.

The medical system has various operations that all need to function smoothly for a patient to be efficiently and effectively triaged. New Orleans was not given the proper resources in the city, let alone their hospitals, to have a swift recovery from the hurricane. The city operated to the best of its ability under the leadership of Director Michael D. Brown of the Federal Emergency Management Agency (FEMA). Louisiana was considered a poor state prior to Hurricane Katrina, especially in the city of New Orleans, where the majority of citizens resided in what was considered low-income households. By examining the politics of FEMA, the Charity Hospital, and the Ochsner Center, I argue that FEMA failed to adequately prepare the various actors within the network of New Orleans, before and after Hurricane Katrina, leading to millions of dollars in damage.

Literature Review

Scholars argue that one's mortality matters based on their location in the US due to environmental impacts. Robert Kaestner is extremely involved in academia with a BA, MA, and Ph.D. all within economics; he is influential in socioeconomics (*Authors · Econ Journal Watch*, n.d.). Kaestner's article challenges an article from Deryugina and Molitor about where you live in the country, especially particular medical facilities, affects your mortality rate (Kaestner, 2021, p. 35). Kaestner's article brings to light that Charity Hospital in New Orleans had a mortality rate similar to other hospitals within the region after Katrina (Kaestner, 2021, p. 39). The article also mentions that after Hurricane Katrina, the medical facilities were able to recover with the help of federal aid; however, Kaestner fails to emphasize the significance of FEMA's contribution to recovery and delays the response to Charity's issues. Lui writes about the essential need for healthcare in Louisiana following the aspirations of India and South Africa after Katrina (Lui, 2010). There was a disruption in Louisiana's free healthcare after Katrina due to the crumbling of their healthcare infrastructure. Lui neglects to mention FEMA's role in healthcare after the Katrina. Sai Lui is a Chinese national that received his PhD from Wisconsin University. With FEMA's contributions, Charity Hospital took a decade to recover from Katrina since the litigation processes were so long and intensive. Both article also fails to mention the lack of preparation the medical facilities received from FEMA or their local government.

The failure to acknowledge FEMA's contributions to the recovery of New Orleans after Hurricane Katrina has significant implications for understanding the full scope of the city's rebuilding process. By downplaying FEMA's role, Kaestner overlooks the complexities of post-disaster recovery, particularly in the healthcare sector. FEMA's financial support was critical to

rebuilding the infrastructure, including the hospitals devastated by the storm. Without this assistance, many medical facilities, including Charity Hospital, would have faced even more significant challenges in resuming operations. Additionally, the lack of recognition of FEMA's involvement could lead to a skewed perception of the effectiveness of governmental response to natural disasters. This misrepresentation may influence future policy discussions and preparedness plans, potentially disregarding the importance of federal aid in the recovery process. Acknowledging FEMA's efforts would provide a more comprehensive understanding of how federal, state, and local agencies worked together to restore healthcare services to the city despite the delays and bureaucratic challenges.

Rodriguez and Dynes also explored the interconnections within the implications of Hurricane Katrina using the social construction framework (Rodríguez & Dynes, 2006). The social construction within the article analyzes the form of television as the primary source of communication for individuals in 2005 and the fact that the channel of communication was inadequate for saving enough people's lives from Katrina. The authors also look at the implications of TV for people across the US- not just within New Orleans- to explain the situation post-hurricane. The framing, television programming, was targeted around finding damage, finding death, finding authority, finding the bad guys, and finding help (Rodríguez & Dynes, 2006). The article frames the "bad guys" that are African American individuals from a lower income background that were suspected of looting, rape, and murder of individuals after the disaster. The article suggests that EMS personnel were anxious to respond to the scene of New Orleans due to television footage of the "mob" of individuals who seemed suspect to illegal activities. The article also subjects the authorities to be first local government officials, then if a city needs further assistance followed by the state, the state must declare necessary need for the

federal government to step-in. Since the article framed authorities in this fashion it explains that there was a confusion about FEMA's role and responsibility after the natural disaster.

The article fails to understand FEMA's role in media coverage and the recovery in the long run. The article also uses the social construction of television as their lens for analysis and as such does not highlight FEMA as juristically significant in communication. The article analyzes the artistic choices of the television debuts, such as screen splitting, background music, etc. as well as the content portrayed in each segment. The Rodriguez and Dynes article influence my research to around the interconnection of the actors since I want to explore responses related to healthcare. The article also validated my claim that FEMA is a failure in its response tactics to the public. However, my analysis is strictly focused on the communication between actors rather than the forms of communication. The forms of communication also neglects the significance of each of the actors off social media platforms which can falsify the implications of a situation.

Actor-Network Theory

Actor-network theory has a network builder that recruits actors to join the network. I chose FEMA to be the actor builder because the federal government affected each actor within the medical community during and after Hurricane Katrina. Callon describes the network as “a set of actors and define their identities in such a way as to establish themselves an obligatory passage point in the network of relationships they were building” (Callon, 1984, p. 201). The “obligatory passage point” that Callon is referring to will be FEMA in my analysis because they hold the entire network together. The network builder as FEMA is essential so that analysis can have a clear thread of connections; however, any of the actors within my analysis could have been the network builder. On a local level, the medical facilities that made the most impact before and after the hurricane in 2005 were what people called “The Big Charity Hospital,”

which was a collection of two public medical facilities (Gratz, 2011, p. 18). The next most influential hospital in the area was the Ochsner Center, a collection of private healthcare facilities. Cressman explains actor-network theory as opening a “black box” of science and technology by outlining the complex relationships between governments, technologies, knowledge, texts, money, and people (Cressman, 2009, p. 3). The “black” is meant to represent the dark or unfortunate outcomes of a system; in my analysis the system is FEMA. The “box” is meant to categorize FEMA’s failures separate from the rest of the department. Within my analysis I look at how each of the actors were affected by the hurricane in response and the governmental influence in solving their challenges.

I chose the FEMA to be my actor network builder within the medical system at the time because regardless of which actor was involved in recovery for New Orleans, they were all directly or indirectly impacted by FEMA at the time. In 2005, FEMA had the ultimate power to help or prohibit recovery for Louisiana, which will remain valid for all natural disasters in the present. I will analyze each actor and then analyze the complex relationships between each actor, including governmental influence and its impact on the public. Through this analysis I aim to show that the failure of the emergency response to hurricane Katrina is attributed to FEMA’s inadequate preparation and communication with its collaborators.

Analysis

Political landscape

Fellows and Cole write about FEMA’s preparations for hurricanes in Louisiana prior to Katrina. The article mentions that FEMA conducted a study through the fictional hurricane “Pam” in 2004 because FEMA had estimated areas of risk within the next five years, and New Orleans was among the top three. Hurricane “Pam” was meant to be a documented simulation for

the worst-case scenario and a yearlong process for local and federal emergency committees (Cole & Fellows, 2008, p. 215). FEMA was the leader in researching preparation methods and funding New Orleans's local efforts to simulate the study; however, FEMA did not condense the information to be appropriately digestible and functional for the proper authorities. FEMA and local officials prepared 300,000 videos telling individuals from poorer wards that they needed to leave the city of New Orleans if a hurricane greater than a category five was projected to hit- the videos were never distributed to the proper personnel of the city (Cole & Fellows, 2008, p. 213). The article argues that FEMA played a role in preparation for the city of New Orleans, but FEMA failed to use its knowledge effectively to save enough New Orleanians.

While several scholars have analyzed the aftermath of Hurricane Katrina in New Orleans in 2005, no consensus has emerged concerning which of the multitude of factors contributed most to their medical facilities' successes and failures. For example, the famous and arguably the most influential actors in the recovery of New Orleans after Hurricane Katrina were the Federal Emergency Management Agency (FEMA) and the US Department of Health and Human Services (HHS). New Orleans was a special city with coverage since most of its individuals were low-income at the time of the hurricane; Louisiana had a unique safety net coverage that allowed all Louisianans healthcare access (McCarthy, 2006, p. 1057). Since all citizens could access healthcare, there became a clear divide between the insured and the uninsured. There were private hospitals and public hospitals that struggled to provide basic care.

Louisiana had one of the highest states of uninsured individuals at 20% in 2005 prior to Hurricane Katrina, equivalent to roughly 900,000 patients without coverage (McCarthy, 2006, p.1057). Ochsner Center, a private state-of-the-art teaching hospital, covered the insured patients. The uninsured citizens were historically African American and were provided care by the less

funded and public hospital Charity Hospital. The HSS approved a Medicaid waiver initiative for individuals in neighboring states, such as Alabama and Mississippi, whose individuals fled after the hurricane but still need medical attention (Rudowitz et al., 2006, p. 393).

New Orleans is known for being a low-income parish and helping those residents receive medical care. However, citizens cannot receive Medicaid unless they have dependent children and no income. Unfortunately, the waivers assigned by HSS did not cover individuals who are not eligible for Medicaid. Many leaders believed the community had new opportunities to rebuild since everything was destroyed after Hurricane Katrina. Donald T Erwin from St. Thomas Clinic said, “We have three clean slates in New Orleans: we have a clean slate for housing; for education; and for healthcare: if we can’t do something to hell with us” (McCarthy, 2006, p. 1056).

Charity Hospital

Charity Hospital was the second largest hospital in New Orleans, built in 1930 and used as a teaching hospital for Tulane University and Louisiana State University. The hospital was in dire need of renovations and additions to the existing hospital because they were growing bigger than the space allotted. During the hurricane, Charity Hospital flooded the basement, and the Coast Guard was asked to help restore the hospital as fast as possible since the hospital was the primary provider for uninsured and poor communities in New Orleans.

Staff Sergeant John Johnson was a veteran electrical engineer tasked with repairing the electrical in Charity Hospital after the hurricane. He takes extreme pride in Charity Hospital since he is a local resident born within the hospital; his children and his mother all have received medical attention from the hospital. He worked for three weeks straight with two hundred volunteers to clear out the hospital and get it back to clinical condition as soon as possible. He

pumped the water out of the basement and rewired the entire ground floor. However, Louisiana State University (LSU) and local government officials wanted to use the hurricane as an “opportunity” to receive extra funding and rebuild the entire facility since if more than 50% of the infrastructure was damaged, the hospital could receive funding from FEMA (Gratz, 2015, p. 20).

LSU reported the facility initially needed \$25 million in repairs; however, by 2008, the cost would escalate to \$475 million (Gratz, 2015, p.17). LSU opened temporary facilities during their disputes with FEMA, and they constantly reminded the public that Charity Hospital would be open in an efficient and prompt fashion for years. Some people believed that waiting to remodel Charity Hospital was simply a way of gentrifying New Orleans into a “whiter” middle-class community since there would be better medical facilities nearby. There became an entire movement opposing Staff Sergeant John Johnson, around the premise that Charity Hospital is a money pit for illegitimate children also known as “Charity Hospital Babies” (Lovell, 2011, p .255 & 259). Since the children of the hospital wanted to keep the facility the same and worked as a community to clean the hospital quickly, they wanted to continue the legacy of children within Charity Hospital.

It is not fair or socially reasonable to state that since most of the New Orleans community comes from a lower income tax bracket, all the children from the hospital came from illegitimate families. There has been a comfortable feeling about doing the same thing for generations, and, understandably, citizens have been resistant to changing the hospital. Charity Hospital experienced an extended reopening delay after Hurricane Katrina until 2015 after being renamed University Medical Center New Orleans.

Ochsner Center

Ochsner Center is one of the largest teaching hospitals not funded by an academic university, and it has three hundred fifty residents and fellows (Quinlan et al., 2006, p. 25). There were three medical facilities within New Orleans encompassing the Ochsner Center: a children's hospital, a heart hospital, and the largest transplant center in the country at the time Hurricane Katrina hit (Quinlan et al., 2006, p. 25). The main campus facility was supported with well water, ample power, and supplies that carried the team. The forms of communication outside the city were redundant in practice, so when limited during a natural disaster, they proved sufficient. Several public officials, local, state, and federal, decided to meet at the Ochsner Center to make decisions on how to rebuild the city and appropriate measures to care for individuals after a crisis when they have nothing.

Synthesis of Actors in Network

Each of the actors, including the political landscape of FEMA, Charity Hospital, and Ochsner Center, played a vital role in the public reaction to Hurricane Katrina. The ultimate goal of the healthcare system is to care for the largest number of people during a natural disaster—especially from the largest hurricane of this century. As mentioned by Dr. Mack, “When the physician is faced with the dilemma of deciding between one versus many, he often has to resort to the principle of promoting the greatest good for the greatest number, or the principle of maximizing utility – [also known as] -utilitarianism” (Mack, 2004, p.63). FEMA attempted to operate under the same utilitarian principles when saving New Orleans; however, the triage process for the medical facilities was poorly planned and executed, making the recovery for the entire city last a decade. The utility of letting Charity Hospital dissolve brings to light the moral obligations FEMA has to a city.

Under a similar lens, of justice theory by John Rawls, he states, “a group of persons must decide once and for all what is to count among them as just and unjust” (Schneider, 2005, p. 5). Policymakers are supposed to be advocates for their citizens. All the actors within the network of this analysis create a larger system headed by FEMA, which is supposed to be a department for the people. FEMA affected the recovery after Hurricane Katrina, without proper communication or apprehension of justice. Due to FEMA, government officials thought that Charity Hospital was not worth the minor renovations to be functional three weeks following the hurricane but needed millions of extra dollars for a new state-of-the-art facility. Due to FEMA locating their correspondents within the Ochsner Center, their information became biased towards the Ochsner being the primary medical facility within New Orleans at the time. Also, the lack of communication before and after the hurricane caused Director Micheal D. Brown to resign from his position. However, FEMA decided to condemn Charity Hospital because it brought more money to New Orleans, which was decided by policymakers, not the people who worked for three weeks straight to fix the hospital. The people that do the work should be the people that decide whether an action is just.

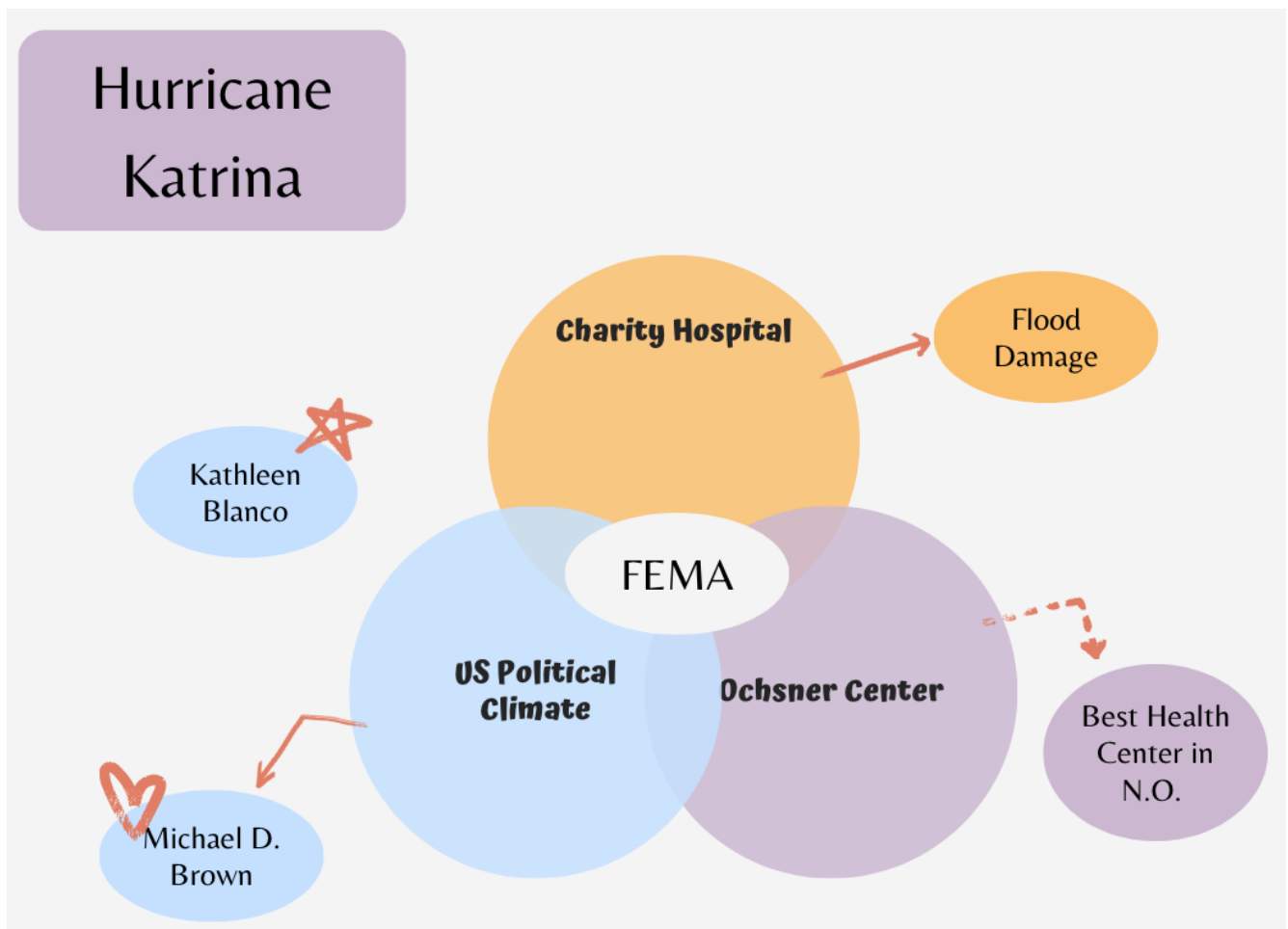


Figure 1: Interaction of Actors involved in Hurricane Katrina

As seen in Figure 1, FEMA is the network builder for this time because they are interconnected into each of the actors: Charity Hospital, Ochsner Center, and the US political climate. Michael D. Brown is a key leader in the political climate for FEMA since he was the director and preparator for the fictional hurricane “Pam.” Kathleen Blanco was a significant figure during Katrina since she was the governor of Louisiana from 2004-2008- her administration is considered the primary formal channel of communication with the federal government. FEMA failed to prepare for the hurricane adequately, and their response was slow in assisting the New Orleanians despite knowing of the potential risks prior to Katrina. FEMA was

aware of the dangers involved in the situation but ultimately failed to have an effective communication and response with individuals.

Contrary to Keeping FEMA

Other individuals, such as the Trump Administration, have suggested that FEMA is inadequate at solving natural disaster issues and should be left to the states to resolve. Trump stated, “I think we are going to recommend that FEMA go away... I’d like to see states take care of disasters” (Colman, 2025). The Trump Administration was referring to the natural disasters of Hurricane Irene and Milton that decimated North Carolina in the Fall of 2024. FEMA has been having a slow response to North Carolina since the hit of the hurricanes in October 2024- however, the department has had over twenty years of knowledge of hurricanes to improve their responses since Katrina.

However, FEMA’s primary responsibility is to send funds to states and local governments and assist in their swift recovery. FEMA only sent 1,400 personnel to assist in the recovery, but the general population of North Carolina is roughly eleven million (*FEMA Continues Recovery Efforts Following Hurricanes Helene and Milton, over \$1.2 Billion in Direct Assistance to Survivors* | FEMA.Gov, 2024). Based on the individuals present from FEMA, disaster relief only represents 0.0001% of the population in North Carolina. Trump also mentions that individuals are getting lost around the state while trying to assist in their recovery. One of North Carolina’s key industries is tourism, and the citizens are used to people getting lost within their state (Tennessean, 2025). The citizens in the U.S., after a natural disaster, need more assistance in having a smooth recovery.

FEMA’s incompetency showed what a response would be without FEMA. Therefore, the incompetency shows how important a working FEMA would be. The local and state

governments do not have the funding or resources to save themselves. If the funding for natural disasters were swifter and had a less delayed response, then municipalities would not have to wait years to recover from the horrific disasters. There needs to be a smoother transition of communication and funds for people. The simulation of “Pam” is also an excellent example of FEMA’s communication being incoherent and not being comprehensible by the masses. FEMA knew there would be a potential risk for New Orleans and mapped out the areas at risk of flooding and the estimated costs of property damage, but when the actual disaster occurred, they did not effectively use that simulation to help the citizens of New Orleans.

Conclusion

The response to Hurricane Katrina involved multiple key actors, including FEMA, Charity Hospital, Ochsner Center, and the U.S. political landscape. Drawing on Callon’s actor-network theory, FEMA is the central network builder because without FEMA there would be no central network to fund New Orleans after Katrina. However, FEMA’s failure to communicate effectively and efficiently with Ochsner Center and Charity Hospital led to delays in recovery. FEMA’s inadequate preparation, despite knowing the risks beforehand, and its slow response prompted public criticism and led to the resignation of FEMA Director Michael D. Brown. Under the lens of justice theory, the public scrutinizes whether FEMA fairly helped the city of New Orleans.

Critics, including the Trump Administration, argue that FEMA is ineffective and suggest that disaster response should be managed at the state level. They point to slow responses to hurricanes like Irene and Milton in 2024, even though FEMA had more than two decades of experience to improve its operations since Katrina. Despite such criticisms, FEMA’s primary role in providing funding and resources to local governments is crucial for swift recovery.

Despite the minor improvements over the years, FEMA's continued slow response highlights the need for more efficient communication and faster relief to avoid prolonged recovery periods.

Without FEMA's financial and logistical support, local and state governments lack the necessary resources to recover efficiently, as shown in the aftermath of Hurricane Katrina. However, there needs to be better communication system that is fair and efficient for the public good.

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