ABSTRACT

Title of thesis: COMPLEXITY IN DISASTERS: A CASE STUDY OF THE HAITIAN

EARTHQUAKE RESPONSE

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This case study explores the development of an international crisis response from the perspective of the United States Coast Guard (USCG). Crisis managers, responders, and communicators from the USCG and from partner agencies were interviewed, as well as representatives from the Haitian publics of the response. The resulting narrative was used to test the previously untested Situational Theory of Problem Solving (STPS) and complexity theory, which had not previously been applied to international disaster response. Findings validated both theories and demonstrated the importance of cultural translators in effecting international disaster response. This study served as a preliminary test of STPS, and a first international application of complexity theory. Practical implications include guidance for crisis managers on how to respond to crises in a complex world, as well as how to harness cultural awareness when responding internationally.

COMPLEXITY IN DISASTERS: A CASE STUDY OF THE HAITIAN EARTHQUAKE
RESPONSE

By

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Dedication

To the people who had nothing to give but their perspectives.

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Chapter 1: Introduction

On January 12th, 2010, an earthquake leveled Port-au-Prince and surrounding cities, decimating an already weak infrastructure, and killing more than 200,000 Haitians (USGS, 2011). Haitians responded first, pulling one another out from under rubble for days before a massive international response provided relief. The United States Coast Guard (USCG) Cutter FORWARD was one of the first international relief agencies on-scene, arriving in Port au Prince harbor early the next morning. Both the USCG and the Haitian people are familiar with disaster - the USCG has a history of both domestic and international disaster response and Haiti shares the fate of most Caribbean countries, directly in the path of westbound hurricanes swollen from warm equatorial waters. Both groups faced grave dangers, high levels of uncertainty, and low control over the environment, especially as aftershocks continued to rattle an already shaken public.

The USCG, at 42,000 active duty members (USCG, 2010), is only slightly larger than the New York City Police Department (NYPD, 2011). Covering 11 major mission areas ranging from port security to drug interdiction to search and rescue to marine environmental protection, the USCG lives by the motto *Semper Paratus,* Latin for "always ready." The Coast Guard maintains a permanent liaison officer to Haiti. Migrant interdiction is one of the USCG's primary mission areas, which requires frequent interaction between USCG sailors and Haitians attempting to enter the United States by sea. Disaster response, another primary mission, has also been a routine intersection between the USCG and Haitian nationals. In responding to the chaos, destruction, and uncertainty of the

earthquake's aftermath, the USCG faced a complex array of challenges - health and safety risks, logistical concerns, a language barrier, and a 200 year history of conflict, both overt and subtle, between Haiti and the government of the United States. The challenges were not limited to international interaction. The USCG was a component of a "whole of government" US response comprising Department of Defense assets, civilian US Government (USG) agencies, and Non-governmental organizations (NGOs), all descending on Haiti without a formalized framework to cooperate within.

The field of crisis management and communication has grown to incorporate numerous other disciplines and theoretical backgrounds in pursuit of image repair, crisis abatement and organizational survival (Gilpin & Murphy, 2008). Today, there are still knowledge gaps addressing crisis response factors including race, gender and culture (Tierney, 2002). Two recent theories - complexity theory and the Situational Theory of Problem Solving (STPS) - present more complete considerations of context and of the nature of interactions with and among the affected populations in crisis situations. Haiti, a country that has suffered the push and pull of international tensions for its two-hundred years as an independent state, seems uniquely, even tragically qualified as an exemplar to provide insight into how subtle, complex historical and cultural factors affect the preparation, execution and reception of a crisis response.

Purpose of Study

More than a year has passed since the earthquake, and at the time of writing, Haiti remains in crisis. Probable causes of the continued crisis abound, ranging from economics to infrastructure to politics to circumstance. In my study

I focused on the immediate, short-term response to the earthquake, comprising the first month of the aftermath. My goal throughout was to determine the overall progression of the USCG's communicative response effort as well as the external and internal formative forces. I was particularly interested in exploring whether historical or cultural context affected the planning or reception of response efforts.

Significance of Study

The existence of organizations such as the Federal Emergency Management Agency (FEMA) and the USCG are testament to the inevitability of disasters. In an increasingly globalized world, the consequences of and obligations to respond to international disasters will increase pressures on American response agencies to bridge cultural and national borders while delivering relief services in unfamiliar and uncertain environments.

This study contributes to both the academic field and real-world practice of crisis communications and management. The STPS and complexity theory offer theoretical frameworks from which to approach crisis situations. Lessons learned from this study support and expand on both theories, adding to the limited body of research applying complexity theory and the situational theory of problem solving to crisis situations.

Organization of Thesis

I begin by clarifying the terms I plan to use, because considerable variation exists in the fields of crisis communication and disaster communication. Following that, I discuss the situational theory of problem solving, and then compare and contrast the tenets of complexity theory and chaos theory to one

another and to this study. Finally, I touch on Haitian history as it may apply to

complexity theory, which sets the context through which we should view the

events and response. Following that, I pose the research questions, present the

methodology, sampling techniques, and data analysis procedures. I present my

findings, and a discussion of the results. I conclude with the theoretical and

practical implications, limitations of the study and directions for future research.

<u>Chapter 2 Literature Review</u>

Dedicated case studies of crisis communication through the lens of complexity theory remain rare. The situational theory of publics (STP) has been applied more frequently, but never in a side-by-side comparison to complexity theory. I found no applications of Kim and Grunig's (2011) STPS. Both complexity theory and the STPS would suggest that pre-determined crisis plans would be insufficient even to a partially anticipated response, much less the unprecedented situation that the earthquake presented to Haiti. For this reason my study will aim to understand the formation and execution of the USCG's crisis responses to the earthquake in Haiti of 12 January, 2010. I hoped to examine how the response was shaped and executed and to determine if the reality of the response fit or deviated from the two theories. Case study tests of these nascent theories contribute to a body of knowledge applicable to crisis response practitioners in a globalized world.

Conceptual Definitions

Crisis is variously defined by scholars based on theoretical grounding, scope of interest, and, seemingly, personal preference. Fearn-Banks (2011) defined crisis as: "A major occurrence with a potentially negative outcome affecting the organization," (p. 2), which I argue could be expanded to encompass groups, communities, or societies. Coombs (2012) definition emphasized stakeholders, labeling crisis: "The perception of an unpredictable event that threatens important expectancies of stakeholders and can seriously impact an organization's performance and generate negative outcomes" (p. 2). Hagan (2007) enumerated synonymous terms including predicament, emergency,

calamity, disaster, or catastrophe (p. 414). Botan (2006) listed two important characteristics of crisis: a demand for a resolution in a time frame too short for the organization to engage in its normal decision making process, and an improbability that the organization will be able to return, for better or worse, to its pre-crisis state (p. 244). This concept is inherent to complexity theory, where a pre-crisis state can never be regained due to the situated, historically contextual nature of a crisis (Gilpin & Murphy, 2008).

Crisis management and *crisis communication*, while closely related, are not interchangeable terms describing the crisis response process. Fearn-Banks (2011), writing on *crisis management*, described a process of strategic planning for a crisis or negative turning point, a process that removes some of the risk and uncertainty from the negative occurrence and thereby allows the organization to be in greater control of its own destiny. Fearn-Banks defined *crisis communication* as the dialogue between the organization and its public(s) prior to, during, and after the negative occurrence. The dialogue details strategies and tactics designed to minimize damage to the image of the organization.

Gilpin and Murphy (2008) favored *crisis management* over *crisis communication* in their discussion of complexity theory, stating a desire to "emphasize the comprehensive mind-set involved in crisis" (p. 7), seemingly sensible in a disaster context because of the additional duties of the communicator to ensure that messages can actually be disseminated. Seeger (2002), presented a chaos-based theory of *crisis communication*, labeling *crisis communication* as a boon to self-organization. Because I will be examining multiple levels of communications hierarchy, and the ongoing process of making

broad communications decisions, I will classify the phenomenon I am studying as *crisis management* and acknowledge that communication comprises a critical portion of its execution.

Strategic communication management mandates the communication or public relations function to operate at a social or macro level of the organization (Steyn, 2007). Grunig, Grunig and Dozier (2002) presented this symmetric communication as a normative standard in their writing on the excellence study, though others maintain that the ultimate purpose is simpler: facilitating persuasion on the organization's behalf (Pfau & Wan, 2006). In *strategic communication management,* the PR or Public Affairs department provides the societal view of an organization and its potential actions to aid in the decision making process, a reflective trait that Vercic, Van Ruler, Bütschi and Flodin (2001) addressed in their discussion of European perspectives on public relations. *Strategic communication management* played a key role in the Coast Guard's response to the earthquake.

Disasters and *crises*, while often equated by mass media, are not mutually inclusive. *Disasters* are events on a community or larger social group scale that "disrupt or threaten to disrupt social context, cause deaths or casualties, destroy property and infrastructure, and disrupt communications" (Killian, 2002, p. 50). The International Telecommunications Union (1998) provided a more detailed description, labeling *disasters* a:

> Serious disruption of the functioning of society, posing a specific, widespread threat to human life, health, property, or the environment, whether caused by accident, nature or human activity, and whether

developing suddenly or as the result of complex, long term processes. (p. 5).

Early disaster studies in the United States aimed to extrapolate the structural impacts of a war on American soil, comparing earthquakes to air raids or industrial accidents to chemical attacks (Quarantelli, 1987). Gilbert (1995) described the conceptual transition of disaster as originating in an action, which manifests a result and incurs a social consequence: "Disaster is tightly linked to uncertainty that occurs when a danger, whether real or not, threatens a community, and this danger cannot be defined through causes or effects (p. 237)"

Communication is as broadly and variably defined as crisis. Early definitions assigned the label to a source transmitting a message of shared symbols, understandings, and identifications to a receiver, with conscious intent to affect the latter's behavior (Miller, 1966; Nilsen, 1957). Later revisions removed the necessity for affective intent, focusing more on the co-creation of meaning (Barnlund, 1978), while modern discussions of communication, specifically in a crisis context, have noted that messages can be decoded differently than they were encoded (Wester, 2009). For the purpose of my research, I will view ideal communication as a two-way, reflexive, self-correcting process, though I do not believe that all instances of communication that I study will necessarily adapt to this ideal. Communication is an emergent process of meaning-making between two or more individuals, and as such, is present in the formation and action of publics.

A *public* is a network of individuals self-organized around a problem (Grunig, 1978, 1997, 2003). Publics can be classified as active, aware, latent, or

inactive based on their level of involvement, tendency to seek information, and recognition of constraints on behavior (Van Leuven, 1991). Grunig (2003) also classified *publics* by scope of concern. An all-issue public is universally active, while apathetic publics are universally inactive. Single-issue publics focus on a concern affecting only a small portion of the population and hot-issue publics are active on a single, widely covered, broadly impacting problem. I anticipate that I will be able to identify various types of these publics in my study, specifically the hot issue public, though I do not aim to predict the specific issues around which the publics will organize.

There are many definitions of p*ublic relations*, and they generally suggest the strategic management of relationships and information flow across selected channels with chosen publics internal and external to an organization (Coombs, 2001; Cutlip, Center, & Broom, 1985; Lattimore, Baskin, Heiman, Toth, *2006; PRSA*, 2011). For my study I preferredHeath's (2001) definition of promoting ideas favorable to the organization while scanning the publics for potential issues and prompting appropriate action most appropriate because it was similar to the Coast Guard's definition of *public affairs.*

Public affairs, while often used interchangeably with *public relations,* "combines government relations, communications, issues management and corporate citizenship strategies to influence public policy, build a strong reputation and find common ground with stakeholders." (PAC, 2011). The US Coast Guard definition of *public affairs*, which is the logical definition to use in an exploration of USCG response, emphasizes engagement with media, legislative, and intergovernmental publics (USCG, 2011). Toth (2006) listed five

criteria of the *public affairs* domain: non-commercial environment, public policy, the public policy process, community and communal relationships, and the opinions of publics. The USCG response function, a non-commercial manifestations of public policy and the public policy process directed at building communal relationships and influencing public opinion, fits the definition of a *public affairs* function.

Culture is a broadly defined and controversial concept, but one that I must attempt to address and define as applicable to my study. Aldoory (2009) offered a relevant definition: "A system of values and norms, ideology, subjective states, ritual and discourse that influence attitudes, perceptions, communication, and actions, within a historical context" (p. 229). This definition shares the underlying concepts I have explored, specifically communication and historical context. Durkheim (1995) argued that culture influences cognition, and that social context is critical to understanding beliefs and attitudes, which is important in an international response context. Though Aldoory approached culture from a perspective of risk communication, other research has applied it to crisis management.

From a complexity perspective, *culture* becomes the shared characteristics of a complex system "present at the level of individual elements, such as the experience and personal opinions of organizational members, as well as at the macroscopic level in the rituals and other features of a shared culture" (Gilpin & Murphy, 2008, P. 30). Keselman, Slaughter, and Patel (2005) explored the effects of culture, which they described as differential knowledge backgrounds,

on public comprehension of disaster information, and suggested that it could cause disparities in the way lay publics interpreted health messages.

Race and ethnicity are frequently equated to *culture*. Spence, Lachlan, and Griffin (2007) examined preparation and post-disaster response to Hurricane Katrina, finding differences in evacuation percentages, hurricane preparation, and post-hurricane information seeking between Caucasian, African-American, and other minority groups. The authors theorized that a portion of this difference was attributable to a historical distrust of authorities by African-Americans. River and Miller (2007) identified "the increasing complexity of natural disasters...the interplay of geospatial, social, cultural, and economic factors in a community's environment" (p. 503) in their discussion of natural disasters framing the African American experience.

Theories

Situational Theory of Problem Solving and Publics

The STP was expanded to a STPS by Kim and Grunig in 2011. In consideration of observations of individual behavior in problem environments, new research on the original STP, and new and reconsidered variables of the process, Kim and Grunig created a framework describing a broader relationship between the factors that create problem recognition and how they encourage or discourage publics to communicate towards problem solving. This theory included the three original situational perceptional antecedents of problem recognition, level of involvement, and constraint recognition, and reincorporated a redefined version of the previously discarded cognitive referential criterion (Kim & Grunig, 2011).

Kim and Grunig (2011) created a hybridized and expanded version of the previous dependent variables of *information seeking* and *information processing* and named it *communicative action in problem solving*. Grunig did not intend the STPS to replace his previous STP, so I will blend my discussion of the two in the areas on which they overlap. I will first discuss the antecedents and intervening criterion, and then the new dependent variable.

The antecedent variables included the STP variables of *problem recognition, level of involvement*, and *constraint recognition. Problem recognition*, defined as the "perception that something is missing and that there is no immediately applicable solution to it" (Kim & Grunig, 2011, p. 128) addresses the combination of perceptual and cognitive problems, the former labeling "the discrepancy between expected and experienced states," and the latter labeling the lack of a solution to the discrepancy (p. 128). *Level of involvement* is defined as "involvement recognition—a perceived connection between the self and the problem situation," (p. 130) and the authors note that *level of involvement* measures the perception of involvement, not the reality of involvement. Constraint recognition retains its definition from Grunig's (1997) STP, and occurs when "people perceive that there are obstacles in a situation that limit their ability to do anything about the situation" (p. 130). *Perceived constraints* can be either internal or external - a recognized cognitive or experiential limitation or an environmental obstacle.

The *referent criterion*, though discarded in Grunig's (1997, 2003) previous updates to his STP, is redefined in a cognitive versus perceptual frame: "Any knowledge or subjective judgmental system that influences the way in which one

approaches problem solving" (Kim & Grunig, 2011, p. 131). The *referent criterion* includes decision guidelines, decision rules, and any information that a problem solver can reference that decreases the need for new data, thus decreasing the necessity for communicative action to arrive at a solution to the problem. The authors also included a subjective aspect of the *referent criterion*, including wishful and willful thinking as strongly affective of communicative action.

The inclusion of the *referent criterion* is particularly important to my study of the earthquake response, because some of the USCG responders and communicators had previous experience with either the general population or the general situation but others were inexperienced. The two experience groups approached the problem of establishing post-disaster communications with different frames of reference. Antecedent factors are similar to the *referent criterion* in that they can influence involvement, motivation and cognition, and have been studied in relation to the STP (Aldoory & Sha, 2007).

Building on social psychology's recognition of motivation as an important antecedent or consequence of informational needs and uses (Higgins & Kruglanski, 2000), Kim and Grunig (2011) introduced *situational motivation in problem solving* as a mediator of the previously defined perceptual variables on communicative action, more specifically as a "state of situation-specific cognitive and epistemic readiness to make problem-solving efforts" (p. 132). Referential criterion are not affected because they are cognitive instead of perceptual.

Kim and Grunig (2011) expanded the two domains of *information seeking* and *information processing* to three domains covering six variables. The three domains of *information acquisition, selection,* and *transmission* address both

seeking and elements of processing, and incorporate the concept of information

sharing, which addressed observed problem solving efforts showing that publics

actively engage in information sharing and selection among their members. The

three domains are further subdivided into passive (*information attending,*

information permitting, and *information sharing)* and active variables

(*information seeking, information forefending,* and *information forwarding*).

The division is based on their general postulate: "The more one commits to

problem resolution, the more one becomes acquisitive of information pertaining

to the problem, selective in dealing with information, and transmissive in giving

it to others" (p. 125).

Information seeking and *attending* have roots in Grunig's (1997, 2003)

STP, and address the tendency of an individual to actively search for or passively

attend to information relating to a problem. An active problem solver will engage

in both behaviors, while a passive individual will only attend to information that

the individual happens to come across (Kim & Grunig, 2011). In a disaster

scenario, this could be manifested as the difference between waiting for aid or

seeking it out.

Information forefending and *permitting* describe how selective a problem

solver will be when working to optimize or economize the available information.

Information forefending is defined as "the extent to which a communicator fends

off certain information in advance by judging its value and relevance for a given

problem-solving task," (p. 126) and the authors' application of it was influenced

by persuasion scholar Chaiken's (1980) observations of participants using

forethought or heuristic information processing when evaluating arguments.

Problem solvers who practice *information permitting* accept any information available, regardless of whether it directly applies to the problem, which can overload the process.

Information sharing and *forwarding* both address information giving. *Information sharing* is passive, a reactive response to a request for opinions, ideas, or expertise about the problem. *Information forwarding*, in contrast, is a proactive 'push' of unsolicited information that the sender considers relevant. Information can include both problem perceptions to build consensus within a public and preferred solution to unify towards action (Kim & Grunig, 2011).

Grunig (1997) described his STP as teleological instead of a deterministic. It can be used to predict when people will think about a problem, but not the content or nature of their thoughts. Though active publics will be more likely to engage in communication and exhibit attitudinal and cognitive effects of the communication than passive publics, a given communication program will not necessarily produce the intended change. Modifying this statement, and applicable both to the STP and the STPS, is Grunig's reminder that "people cannot be affected by messages that they do not seek or even process" (p. 38).

The STP has been applied in numerous studies (Aldoory, 2001, Grunig, 1993, 2003, 2011, Major, 1998), but there are few studies examining perceptions of an impact by one public on another. Grunig's examination in 1983 of journalists and their perceptions of their audience and his 1989 study on the effects of an activist public on a non-activist public are the two examples I found. There is a gap in the literature regarding perceptions that disaster responders

hold of populations they are assisting, and vice versa. A deeper understanding of this relationship, and how each public regards one another, could contribute to future disaster responses.

Chaos Theory and Complexity Theory

Chaos theory and complexity theory both originated outside of the field of communications theory, but both have been adapted and applied in crisis response scenarios (Gilpin and Murphy, 2006; Murphy, 1996; Seeger, 2002; Sellnow, Seeger, & Ulmer, 2002; van Uden, Richardson, Cilliers, 2001) and the terms have often been used interchangeably or with minimal differentiation. I relied on the perspective of complexity theory, which shares some concepts with chaos theory. In this section I describe the two theories and explain the differences between complex, chaotic, and complicated systems. Throughout my discussion, I relate the applicable concepts to my research and indicate the gaps that I feel my research addressed.

Chaos Theory

Seeger (2002) proposed an approach to crisis communication based on chaos theory following Murphy's (1996) initial suggestion that the theory be integrated into the field of crisis communications. Seeger labeled previous crisis response methods as reductionist, which Goldberg and Markóczy (2000) defined as explanations relying previously understood terms or simpler concepts and the interactions between them, often without recourse to intermediate levels. Complex systems are dynamic due to their non-linear nature, multidirectional causality, and instability over time. Both complex and chaotic systems are

considered irreducible, a concept often explained by the mathematical concept of *fractals.*

Fractals are a mathematical concept first named by Mandelbrot (1982) that describe non-linear calculations whose graphical representations illustrate the effect of small consistent changes over time. Mandelbrot's classic example used the coastline of England, which would be measured very differently at scales of one, ten, 100, and 1000 meters, despite having a consistent pattern of bays, harbors, and peninsulas. Though Mandelbrot presented fractals as an equation, they were incorporated into the crisis communication literature as qualitative descriptive aids, not predictive tools (Gilpin & Murphy, 2008). The concept of fractals serves to remind the communicator that an understanding of a situation is dependent on scale, and what holds true from one perspective may prove to be inaccurate at a different one. Sellnow, Seeger, and Ulmer (2002) applied this concept in their study of the Red River Valley floods to explain how the maximum crest height of the Red River exceeded the predictions made by the National Weather Service. Fractals serve as cautionary reminders in our quest for pattern recognition, but can also serve to remind us that patterns exist, even in apparently chaotic situations. Sellnow, et al.'s (2002) study assessing state and local responses to the Red River Valley floods was one of the first studies to adapt chaos theory to crisis communication. Their study highlighted the beneficial roles of improvised communications, self-organization, and external relief organizations.

Self-organization occurs in both chaotic and complex systems (Seeger, 2002, Gilpin & Murphy, 2008). While including a discussion of organization

emerging from disorder in a theory that presents chaos as a standard seems paradoxical, it serves as a balance, or a mirror image to the rejection of Newtonian, linear modeling that the theory also recommends. Comfort, Sungu, Johnson and Dunn (2001) described self-organization as "mutual adaptation" (p. 147) in their study of complex systems in crisis, referring to the difficulties faced by emergency response agencies in coordinating their systems to work together. Comfort et al. studied intentional efforts at self-organization, but other scholars (Ashmos, Duchon, & McDaniel, 2000; Freimuth, 2006; Sellnow, et al., 2002) have studied emergent self-organization, which appears to be more consistent with the tenets of complexity theory. Freimuth described emergent self-organization in response to the 2001 anthrax mail attacks, specifically from a chaos theory perspective. Freimuth demonstrated how the Centers for Disease Control press team faced a bifurcation point in being under-staffed and over-taxed, but self-organized into a more cohesive, flexible unit with refined goals and procedures in response to the insufficient capabilities and gaps in response plans made evident by the attacks. Ashmos et al. stated it most succinctly, calling self-organization the "ability to reconfigure connections and activities" (p. 579).

Self-organization holds particular salience in a disaster environment. Perry and Lindell (2003) studied citizen responses to disaster, dispelling the popular myth that populations resort to primal states of panic in the aftermath of disasters. Self-organization can be emergent, which is to say that it can be spontaneously generated, and can generally be influenced by *attractors*. *Attractors* can pull systems towards *attractor basins*, consistent states expressing a certain behavior, attitude, or value (van Uden et al. 2001). In a crisis

management context, these states can be higher or lower levels of organization, for example: public outrage, mutual cooperation, or organizational confusion. *Attractors* of chaotic and complex systems fall into three categories: *stable, unstable,* and *strange.*

Stable attractors are behaviors, both unique and cyclical, that tend to increase the organization of a system over time (Gilpin & Murphy, 2008). Examples of *stable attractors* include: press conferences, daily meetings, or an organizational ethos that informs the actions of its members. *Unstable attractors,* on the other hand, tend to destabilize the system that they are influencing. They are erratic and unpredictable, and can trigger crises in the system . Examples of *unstable attractors* include issues left to simmer, organizational blind spots, inequitable practices, and subversive organizational agents. Neither of these *attractors* deviate significantly from common sense, but the third type, *strange attractors*, is less intuitive.

Strange attractors are organizing principles, inherent shapes or states to which a phenomenon will repeatedly return as it evolves. They are considered strange because they don't operate from a fixed point or in linear ways, instead "describing behaviors that look random in the short term but that, through multiple interactions, gradually acquire an organized pattern" (Gilpin & Murphy, 2008, p. 38). Seeger (2002) reconsidered the traditional quantitative approach to crisis communication because of strange attractors, urging a more holistic search for understanding and awareness of emergent patterns that traditional quantitative methods might fail to document. In their study of the Red River Floods, Sellnow, et al. (2002) identified emergency response agencies like the

National Guard as *strange attractors*. Their presence reassured the stricken population, implementing order in the post-flood urban environment. Freimuth (2006), discussing CDC response to the 2001 anthrax attacks, credited the exigent communication requirements placed on the CDC communicators as a strange attractor leading to self-organization. The pro-social tendencies observed by Perry and Lindell (2003) could also be credited as a strange attractor - re-unifying fragmented populations despite uncontrollable external stimuli. When changes in systemic organization occur abruptly, they are labeled *bifurcations*.

Sellnow et al. (2002) addressed the *bifurcation*, a point of change, specifically systemic change emerging in a chaotic environment. *Bifurcations* are "abrupt, discontinuous, and divergent," (Mathews, White, & Long, 1999, p. 445) causing a breakdown in system equilibrium, though they can result in both increased and decreased levels of order. An complex system moving from one *attractor basin* to another can be considered a *bifurcation* as well. An earthquake can act as a *bifurcation*, as can the associated destruction of infrastructure, and can lead to a *cosmology episode*.

Cosmology episodes, adopted from philosophy into the crisis communication field by Weick (1993) are *bifurcations* resulting in collapse of order. *Cosmology episodes* occur, "when people suddenly and deeply feel that the universe is no longer a rational, orderly system... the sense of what is occurring and the means to rebuild that sense collapse together" (p. 633). Sellnow, et al. (2002) found *cosmology episodes* in their study of the Red River Valley flood, demonstrating how affected publics lost their ability to make meaning of and respond to a disaster when the scale of the disaster exceeded both their previous

experience and their expectations. In the Red River Valley, firefighters watched fire spread through flooded streets, emergency planners were taken by surprise as the river rose beyond anticipated levels, and the affected general public watched as their preventative efforts were rendered ineffective. All involved parties were forced to reassess their perspectives, and order was eventually able to re-emerge from the chaotic environment. Weick (1993) also described the learning process that could follow a *cosmology episode* as a critical point in the recovery of the system.

Complex Systems

Complex systems are distinct from both complicated and chaotic systems. Complex and complicated sound similar, but in fact derive from slightly different etymological roots. The New Oxford American Dictionary (2009), attributed the origin of complicated to words meaning "folded together," while complexity originated with words meaning "embraced" (n.p.). Non-linearity distinguishes complex systems from merely complicated ones by decreasing the observer's ability to predict specific outcomes. This hinders a crisis manager's role to apply pre-established plans or deliver unequivocal guidance, despite the constant pressures from the public or management for certainty (Gilpin & Murphy, 2006; Seeger, 2002; Sellnow, et al., 2002). Indeed, complexity theory posits that "no two situations are alike or even similar enough to permit direct comparison," (Gilpin & Murphy, 2006, p. 381). The concept of irreducibility, also present in chaos theory, discourages a quantitative or analytical approach to crisis response because samples are not inherently indicative of the state of the whole. Also, a sample assumes that a momentary state (the time at which we take our sample)

can be linked directly to the moments preceding it and following it, thus violating the non-linearity of complexity (Gilpin & Murphy, 2008). While these characteristics may seem to discourage scholarly research and professional action, the rule-based, self-organizing aspects of the theory give hope to the crisis management practitioner and scholar.

Joslyn and Rocha (2000) defined a complex system as:

Any system consisting of a large number of interacting components (agents, processes, etc.) whose aggregate activity is non-linear (not derivable from the summations of the activity of individual components), and typically exhibits hierarchical self-organization under selective pressures (p. 72).

Gilpin and Murphy (2006) defined a complex system as one in which the interaction of its various parts create a product greater than their collective value. This definition is qualified by Fioretti's (1998) assertion that complexity is an externally defined characteristic that describes the relationship between the observer and the system. A complex system is composed of individual elements/agents whose interactions produce adaptability in the system over time and are local, rule-based, recurrent, and non-linear, which makes the system both self-organizing and unstable. Complex systems are dynamic and are influenced by both their historical and current contexts because of permeable, ill-defined boundaries. These interacting characteristics mean that the systems are irreducible, because to cut out any piece handicaps our ability to understand the whole (Gilpin & Murphy, 2008).

To further distinguish between a complex and a chaotic system, Goldberg and Markóczy (2000) explained:

The study of chaos generally involves the study of extremely simple nonlinear systems that lead to extremely complicated behavior, and complexity is generally about the (simple) interactions of many things (often repeated) leading to higher level patterns (p. 75).

In more basic terms, chaos theory posits that a simple set of rules applied to a system will result in very complicated output, while complexity theory describes "how the interaction of billions of individual entities can lead to something that appears designed or displaying an overall systems-level pattern" (Goldberg & Markóczy, 2000, p. 76). The key difference between the two theories lies in the concept of the discernible pattern, more concretely described as the emergence of organization. While chaos theory does describe elements that form patterns, it does not help explain the operation of a system.

Complexity Theory

Chaos theory and complexity theory both describe rules governing the development of systems, but differ in their consideration of the systems themselves. A critical difference between theories of chaos and complexity is the degrees of freedom they attribute to systems, and this is what informed my decision to focus on complexity theory. Anderson (1999) suggested that to study complex adaptive systems without losing meaning to abstraction or compression, one can focus on the localized, contextualized actions of a single agent in relation to its environment (p. 220). Alternately, as van Uden, et al. (2001) addressed when discussing the difficulties of applying complexity theory to the study of

organizations, examining the differences between multiple perspectives helps address the otherwise insurmountable reality that no one perspective is sufficient to understand an irreducibly complex system.

From an organizational perspective, two types of complexity approaches have been characterized. Boisot and Child (1999) presented the organization as a complex adaptive system, continuously self-organizing and evolving, and described the tendency of organizations to either reduce or absorb complexity. Boisot and Child initially described complexity reduction as finding the most appropriate single representation of environmental variety and acting on it, while complexity absorption is embracing a variety of potentially conflicting viewpoints about the environment. Ashmos, Duchon and McDaniel (2000) studied these two organizational approaches further, and refined both definitions. Complexity absorbing organizations orient themselves towards externally influenced self-organization, altering organizational structures, processes, or priorities to fit the emergent needs of the scenario. These organizations co-evolve with their environments, aided by large numbers of relationship-based connections and maintain a level of requisite variety that imparts flexibility in an unpredictable environment.

Complexity reducing organizations, on the other hand, view order and homeostasis as an ideal state. They focus on linear, cause-and-effect relationships, and desire simplicity in their operation and purpose. Organizations desiring reduced complexity often move towards a narrower world-view than organizations embracing complexity. Complexity reduction, though contrary to

the normative aspects of the theory, can be advantageous in some organizational settings, specifically when limited resources are available.

Ashmos et al. (2000) further segmented their conception of complexity. Goal complexity addresses the decision of an organization to pursue a single goal or to spread its efforts out over multiple goals. Strategic complexity addresses strategy in a similar way, clarifying whether organizations focus on a single strategy or adopt numerous different approaches to interacting with the complex environment. Interaction complexity describes the nature of relationships internal and external to an organization, resulting in a complex network of agents or a simpler, more regimented hierarchy of decision makers. Structural complexity, similar to interaction complexity, relates to the flow of information. Centralization is a low-complexity approach, and discourages spontaneous reorganization in response to emergent problems and stimuli. Given the various criteria, it should be apparent that organizational complexity is not a quality simply possessed or lacked by an organization.

A final consideration of complexity theory is the importance of *historical context* (Gilpin & Murphy, 2008), or what chaos theory labeled *sensitive dependence on initial conditions*, known popularly as the *butterfly effect*. At an organizational level, Bechler (2004) explained "treating the crisis as an isolated event to be dealt with…fails to account for the systemic nature of organizational life" (p. 67). He portrayed crises as necessary correctives, a strategy which may seem less applicable in a disaster context, but which may be appropriate, because historical context is another way of looking at the previously mentioned *sensitive dependence on initial conditions*. The history of a system, represented in the

organizational, cultural, or individual memory of its components, will affect how it responds to new stimuli. The *historical context* of complex systems forced a revised definition of a successful crisis response.

Crisis Response Best Practices

Scholarly discussions of crisis communication best practices focus on crisis response organization and interaction with publics. At the organizational level, crisis communication is considered more effective when it is incorporated in the decision-making process. Pre-crisis planning and communication can reap rewards for an organization in crisis (Heath, 2006; Seeger, 2006). Collaboration is imperative when multiple agencies respond to a crisis, though crisis scholars have not yet reached consensus on the efficacy of coordinated messaging, commonly referred to as speaking with one voice (Heath, 2006; Sandman, 2006; Seeger, 2006)

Crisis communicators are advised to "accept the public as a legitimate and equal partner" (Seeger, 2006, p. 238). Understanding the public and identifying public concerns help an organization achieve credibility. Seeger equated perception and reality in dealing with the public. Acceptance is equated with respect, as are honesty, candor, and openness, which form a continuum of communication practices. Honesty is answering questions and providing accurate information. Candor is a willingness to share unfavorable information. Openness is the most transparent state, where an organization shares all information it has access to (Seeger, 2006). Crisis communicators should accept uncertainty and ambiguity, inescapable in many crises, though most of the literature I found only addressed this concept from a press agentry perspective (Heath, 2006; Sandman,

2006; Seeger, 2006). The media is viewed as an important public, but scholars have disputed its value. Seeger (2006) claimed that the media are "obligated to report accurately and completely" (p. 240) while Heath (2006) disparaged reporters that would "fill air and print, even though some sources are virtually useless or counter-productive to the community's understanding and the public interest" (p. 246).

None of the best practices I found addressed international crisis response. The uncertainty associated with crises was only applied to interactions with the media or general population, not with the process of making communicative decisions. Crisis management plans, maligned and championed (Heath, 2006; Seeger, 2006), are promoted as a valuable tool that crisis communicators are encouraged to consider pre-crisis, but require a foreknowledge of potential crises. A complex consideration of crisis response may address these shortcomings.

Complex Crisis Response Best Practices

I was unable to find literature addressing best practices of complex crisis response, but scholars have addressed how to assess the success of a response, which is a useful starting point. Complexity theorists view complex systems in crisis as unbounded because crises are historically situated. Assigning a discrete beginning is difficult and because the system in crisis experiences irreversible transformations, assigning a definite end is similarly difficult (Gilpin and Murphy, 2008). This contrasts with the dominant paradigm, which emphasizes reliance on and analysis via a crisis management plan and crisis management team (Coombs, 2012). Instead, assessment of complexity responses focus on procedural actions. A successful response maintains permeable boundaries

between the organization and its environment through prioritized relationships. Doing so contributes to complexity absorption. Requisite variety, the diversity of viewpoints and experiences roughly matching an organization to its target publics, helps the system predict a range of possibilities and adapt accordingly (Weick, Sutcliffe, & Obstfeld, 1999). Finally, a successful responding organization enacts desired outcomes, turning its goals into reality (Ashmos, et al., 2000; Falkheimer & Heide, 2010; Gilpin & Murphy, 2008). Success can also be measured by the presence of double-loop learning, the ability to see larger patterns of influence and causality that lead to the crisis as opposed to just fixing the immediate problems (Argyris, 1977; Gilpin & Murphy, 2008).

Haiti: The Country With a Last Name

Haiti, as reported on its U.N. member page (Permanent Mission of Haiti to the U.N., n.d.), is the poorest country in the western hemisphere. This surname is echoed throughout the U.S. news media, along with conflicting reports documenting the AIDS infection rate as either the highest in the Caribbean or lower than several other Caribbean nations (Katz, 2009; USAID, 2011). Haiti's history has been fraught, beginning with the annihilation of the indigenous population in the years after first contact with Europeans, continuing through 35 separate coup attempts since it won independence from France in 1804, and culminating in recent memory with the despotic rule and subsequent rebellion against the Duvaliers and the troubled growth, retardation, and recent disruption of Haiti's modern democracy (Robinson, 2007). A U.N. stabilization force called MINUSTAH, from the French *Mission des Nations Unies pour la stabilisation en*

Haïti, entered Haiti upon Aristede's departure, and they have maintained a continuous presence since (UN Security Council, 2004).

U.N. Security Council reports from 2005 confirmed that Haiti's political actors "acknowledged that Haiti was in a deep political, social and economic crisis" (U.N. Security Council, 2005, p. 3). That same report noted frustrations expressed over the presence of foreign troops in Haiti, which was perceived as a violation of sovereignty. U.N. Security reports from 2005-2009 shared common themes of instability, distrust of Haitian authorities, resentment of international presence, and community administered vigilante justice. Throughout the same time period, Haiti was barraged by devastating hurricanes, tropical storms, and floods (Masters, 2011), which U.N. Security Council (2009) reports labeled as grave setbacks in the socioeconomic development of the country. Haiti had not yet recovered from these storms when the earthquake occurred on January 12th.

Rationale for Study

The ground shook in Haiti's capitol city of Port-au-Prince at 4:53 PM on January 12th, 2010. The Haitian people named it "goudougoudougoudou," the onomatopoeia of the sound (Accilien & Laguerre, 2011, p. 95). The earthquake's epicenter lay 15 miles west of the capitol. 222,570 people died, 300,000 were injured, and 1.3 million were displaced (USGS, 2011). The response, which I seek to explore and describe, was international in scope, but consisted primarily of United States military forces. The first U.S. representatives on scene were members of the USCG. As the aftershocks continued to rattle the country, Haitians were the first responders, and Haitian-led organizations played a central

role in the emergency response process. In many ways, the crisis is still active, more than a year later.

The earthquake fit the criteria for a crisis: It was a major seismic event that profoundly affected multiple organizations both within the national borders of Haiti and the USCG. A quick search of American media outlets revealed each of Hagan's (2007) listed terms of "predicament, emergency, calamity, disaster, or catastrophe" (p. 414). Botan's (2006) characteristics were also present: the extreme poverty exacerbated the impact of the earthquake, creating a pressing demand for relief assistance in an environment not suited to its delivery, and the devastation to and because of Haiti's infrastructure ensured that a return to normalcy would neither be possible nor desirable.

Very little academic research exists on intercultural disaster communication, though there is a large body of research in disaster sociology (Killian, 2002; Quarantelli, 1987). The physical impact of the disaster also manifested psychological and societal consequences, disrupting communications and crippling infrastructure in the process. In the aftermath of a disaster, affected populations are deluged with information from the surrounding environment, others affected by the events, and relief workers. Disasters frequently damage existing communication networks, so consequences of this flood of information may be discernible in a study of local connections. This leads to my first research question.

RQ1: How did the US Coast Guard shape and implement crisis management with its publics?

Kim and Grunig's (2011) expansion of the STP was motivated in part to broaden its application from solely public relations to arenas of decision making, problem solving, and information use. In doing so, they bridged public relations, crisis response, and disaster response. Their theory applies to both the affected publics and the response agencies as publics. We can expect problem solving to occur across the spectrum of the response, at the organizational, social, and individual level.

Kim and Grunig's (2011) explication of *information forefending* and *permitting* describing which information individuals choose to consider or ignore are particularly applicable in the chaos of the post-quake environment. *Information sharing* and *forwarding* could affect individual discussions about where to find assistance, the health or location of family members, or individual perceptions of the extent and severity of damage. Kim and Grunig's theory is currently unillustrated. I seek to examine its utility as a framework for understanding this exemplar case.

Complexity theory has been applied to crisis and disaster scenarios (Ashmos, Duchon, & McDaniel, 2000, Comfort et al., 2001, Gilpin & Murphy, 2008). The typologies of complexity described by Ashmos et al. should be helpful in my examination of the response. The unpredictability of complex systems leads to my second research question:

RQ2: How did the publics of the US Coast Guard receive and respond to USCG communicative actions?

The confluence of numerous different cultures: military, civilian, Haitian, and non-governmental organization made unpredictable interactions inevitable.

The studies on the role of history and culture in disaster communication that I found were strictly limited to the context of American citizens living in the south, but the existence of racial disparities is sufficient motivation to prompt my inquiry into whether historical racial or cultural tensions could affect the response efforts to the Haitian earthquake. I was unable to find any studies examining these issues in the context of international disaster response, which led to my final research question:

RQ3: How did culture/history influence communications between the USCG and its publics?

Chapter 3 Methodology

I conducted a qualitative case study of the responses by USCG and local actors to the 2010 Haitian earthquake. Yin (2009) identified case studies as the appropriate method for answering how and why questions about contemporary events if the researcher is unable to exercise behavioral control over participants. In this section, I discuss the strengths and limitations of the case study method, the sources of evidence I collected in my research, and the techniques I utilized to obtain, code, sort, and analyze my data. Additionally, I discuss validity and reliability as they applied to my research. I conclude with a discussion of potential sources of bias.

A case study drawing on qualitative methods is conducive to the research problem. Aldoory (2001) wrote that qualitative research is required to explore the dimensions and factors of the STP, specifically to gauge publics' levels of problem recognition, involvement, and constraint recognition. Grunig's (1997) suggestion for further research on "how publics think, feel about, and behave towards our client organizations so we can...communicate more effectively with them" (p. 39) also requires qualitative inquiry. The holistic, detailed nature of a case study is appropriate for complexity theory. A case study enables the complex systems being studied to be represented in full instead of being reduced to overly specific variables and abstractions.

I began my study with a review of available documents to develop a framework of the timeline of events. I was seeking any on-the-record information that guided the USCG's decision-making process. Following that, I conducted a series of in-depth interviews with nine USCG personnel, focusing on crisis

communication decisions made by members directly involved in the planning and execution of the Haitian earthquake response. To deepen my understanding of the cultural context of the response, I traveled to Haiti in the summer of 2011, where I spent a month working with a British relief organization. Traveling to Haiti also allowed me to conduct in-person interviews with four representatives of Haitian Governmental Organizations (HGOs), and six interviews with other responders and communicators involved in the response, including members of the United Nations (UN), non-governmental organizations (NGOs) and other US Government (USG) agencies. The relief work I contributed to was secondary to my interviews, but the participatory nature of the experience helped shape my understanding of the intercultural context. I received Institutional Review Board approval for this study and adhered to the policies and procedures set forth when using human subjects for research purposes.

Case Study Methodology

A person, a social setting, a group, or an event can be the subject of a case study. In the case study method, the researcher systematically gathers information to build an understanding of how the subject operates or functions (Berg, 2009). Case studies are useful for both simple and complex phenomenon, especially when the phenomenon is situated in a particular context. Though a case study is typically bounded by time, it can be completed when the borders between the subject and its context are vague (Yin, 2009). Case studies can provide both a deep understanding about the nature of a specific event, and also the tools we need to relate it to existing theory or create new theory if necessary.

Triangulation is a central aspect of the case study method and of qualitative research in general (Creswell, 2003; Yin, 2009). Compiling different sources of information about the response helped me to develop a coherent, multifaceted account of what happened, as well as a fuller justification for the themes, concepts, and patterns that emerged. "Converging lines of inquiry" (Yin, 2009, p. 115) and corroborating evidence lead me to more convincing and accurate conclusions. I worked towards triangulation by comparing interviews and perspectives, to document accounts. Triangulation can result in an unusually high amount of data, because each fact requires multiple sources of verification, but the result is a more complete product, and was justified in this case.

Case studies have been criticized as being less rigorous and less systematic than other forms of research. The perceived lack of rigor is not inherent in the nature of the case study, but rather has been observed in previous research applications (Yin, 2009). Case studies are often cited for a lack of generalizability, especially the single-case design, but because I was not seeking "grand theory" output, and because I focused on analytical generalizability, I believe that my research can contribute to a greater body of knowledge and contribute to the extant theory. Case studies present the risk of overwhelming the researcher with data, and can lead to lengthy reports, which I addressed by striving for parsimony while giving due consideration to all the data I collected.

The case study method offered unique advantages compared to other sources of inquiry. The study of a real world events provided a deeper, richer experience than I would have been able to obtain in a laboratory setting, and the focus on contemporary data sources provided more opportunity for descriptive

inquiry than historical or archival methods (Yin, 2009). The holistic focus of my case study uniquely situated it as a tool for analyzing and understanding the operations of the complex systems of the response (Berg, 2009).

A final consideration of case studies is present in Berg's (2009) discussion of human ecology. The complexity of the systems I studied stems from their human components, shared by human ecology's concern with "the interrelationships among people in their spatial setting and physical environment" (p. 333). Though the area affected by the study was geographically broad, I was able to find points of intersection: points of entry, command centers, and official meeting sites. Berg suggested using maps to "indicate physical and social proximity of items and events occurring in the community" (p. 333), and my pilot investigation of the USCG earthquake response document revealed maps made by the response team. In conducting the interviews, I discovered the effects of geography on the response, often exacerbated by the crippled communication infrastructure within the country.

Case Study Evidence Source: Documentation

My position as an officer in the USCG provided me unique access to the official USCG archive documenting the earthquake response, though most of the material would likely have been available via a Freedom of Information Act request. Berg (2009) emphasized ethical concerns relating to archives, including personally identifiable information. The archives I received were not redacted as they would have been if obtained via a FOIA request. I took particular care to avoid disclosing any sensitive information when discussing the documents.

Documents provide a rich source of data, and document review can yield motivational themes, goal complexity, and organizational patterns (Kidder, 1981). Documents that I considered for this study included situation reports, meeting minutes, previously recorded oral histories, photographs, maps, emails, and operational messages. I first sorted the documents by date of creation, and then used them to construct a version of the USCG response narrative. This timeline allowed me to triangulate the narratives of my participants, and also helped me to assign significance to the response problems identified in interviews.

Documents, though easier to access than interview subjects, present several limitations that I accounted for when conducting my review. Documents, especially organizational documents, are typically written for a specific audience and for a specific purpose. It may be more difficult to identify the bias of the author than in an in-depth interview. Additionally, I doubt that the documents that I was granted access to were all the documentation available (Yin, 2009). The USCG historians cautioned me that the record was incomplete because the Deepwater Horizon oil spill occurred during their collection, so they had to shift focus. For these reasons, I used documents for triangulation instead of for independently establishing fact. Additionally, I tried to heed Yin's advice to constantly try to identify the purposive intent of the document creators.

Case Study Evidence Source: In-Depth Interviews

The majority of my evidence came from in-depth interviews with USCG personnel, other responders, and HGO representatives. Berg (2009) defined in-depth interviews as "conversations with a purpose" (p. 101). Rubin and Rubin

(2005) used the term "responsive interviewing," and included a variety of styles united in "a dynamic and iterative process, not a set of tools to be applied mechanically" (p. 15). I moved between comfortable and familiar environments (the USCG) and unfamiliar, often hazardous environments, and so a fluid interview style was well suited to capture the important data as defined by both myself and the participants. Yin's (2009) description of case study interviews as "guided conversations rather than structured queries" (p. 106) speaks to this approach.

Rubin and Rubin (2005) proposed a typology of interviews based on breadth and subject of focus, and used their definition of an elaborated case study method. The purpose of interviewing is to "find out what happened, why, and what it means more broadly...to be able to generalize to broader processes, to discover causes, and to explain or understand a phenomenon" (p. 6). During my interviews, I used the theory elaboration method described by Rubin and Rubin to pull out themes. I presented the themes I perceived to participants for feedback and elaboration.

I used a semi-structured format to interview my participants. I felt that a formalized, regimented questionnaire and process would hinder rapport with the participants and fail to tap relevant but unanticipated data. On the other end of the continuum, an unstructured interview would be similarly unsuited to my study because I had already stated research questions and found a set direction for my inquiry. Because of my unfamiliarity with many of the issues, I sought to retain what Berg calls "the freedom to digress...to probe far beyond the answers

to [my] prepared standardized questions" (p. 107). Rubin and Rubin's characteristics of the responsive influenced my approach, highlighting that:

- ⚲ The interview is about obtaining the perspective of the interviewee and their understanding of the world;

- ⚲ Interviewing is an exchange, and the personalities and circumstances of both parties matter;

- ⚲ The interview forms a relationship, I have an ethical burden to protect the interviewee;

- ⚲ Questions should be broad enough to allow the interviewee to answer as he or she sees fit, instead of how I may want them to;

- ⚲ Maintaining flexibility and adaptivity is critical, as is following up on insights and ideas.

Member checking ensured that I captured comments as the participants intended, hopefully unaffected by my biases or unfamiliarity with the topic matter. Yin (2009) similarly asserted that the interviewer remain unbiased when asking questions. Prior to beginning my interviews, I conducted reflexive writing to attempt to identify and isolate my internal sources of bias, at the very least documenting them for the awareness of the reader. I feel that the semi-structured nature of my interview approach limited the influence of any biases I may have retained by allowing the participants to shape and own their responses and the flow of the interview.

Rubin and Rubin (2005) highlighted the conflict between the need to stay on topic and the desire to build conversational rapport. Throughout my interviews I had to contend with what Berg (2009) labeled evasion tactics, a

"word, phrase, or gesture that expresses to another participant that no further discussion of a specific issue (or in a specific area) is desired" (p. 128). My immersion in an unfamiliar culture made this process significantly more difficult, but I anticipated and attempted to ameliorate my ignorance by working in Haiti for three weeks before starting my interviews. At times I felt that participants gave what they perceived to be socially or organizationally appropriate answers, especially given the bureaucratic nature of the USCG and the assistance-based relationship between the HGOs and the USCG. I attempted to address this in two steps. First, I shaped my questionnaire in accordance with Berg and Rubin and Rubin's suggestions, starting with easy, non-threatening questions, moving to more sensitive questions, and circling between validating questions and new topics, to keep the conversational flow. Second, I used probe questions, redirects, and rephrased questions to ensure that I captured the appropriate depth and subtly influence the direction of conversation without disturbing the participants.

The interpersonal connection developed by in-depth interviews carry the risk of biasing the interviewer as well as recording the biases of participants. Yin (2009) identified the increased chance of interpersonal affective bias when relying on in-depth interviews and reiterated the need to triangulate facts as a corrective. This risk is offset by the considerable strengths of the interview method - namely the ability to build a rich understanding of the created meaning of events, the human intentional and unintentional forces that shape organizational decisions, and the opinions and attitudes behind behavioral invents (Yin, 2009). Researcher bias can also taint the question building, data collection, and analytical processes. To address the interview schedule bias, I

thoroughly reviewed the questions prior to the interviews and conducted pilot tests of my questionnaire to ensure that it accessed the appropriate information. The semi-structured interview format allowed participants to share information that I had not known to ask about, which allowed me to rapidly redirect my focus as I came to understand the fragmented nature of the USCG response.

Two significant barriers to my interview process were the geographic distribution of USCG participants and the incongruities of the USCG and NGO responses. To overcome the first barrier, I traveled to Haiti to meet several of my participants in their working environments, and conducted telephone interviews with others, which I recorded and transcribed. Berg highlighted that telephone interviews prevent the researcher from using full channels of communication, but I believe that the lack of visual cues was secondary to overall access to the participants and their experience.Regarding the incongruous response, I had to make a more drastic modification to my research.

My initial goal of a comparative case study of USCG and NGO responses were, in retrospect, grandiose. I misunderstood the scope of the USCG response, and did not realize that there were no NGOs completing directly similar missions to the USCG. As I was planning my trip to Haiti and conducting interviews with USCG responders and communicators in the US, I realized that I would not be able to compare two independent responses. Instead, I decided to use interviews with NGOs as a method of tapping cultural familiarity and triangulating concepts that emerged from my USCG interviews. Ultimately, I chose to include a small sampling of responders from NGOs, the UN, and other USG agencies to capture a

variety of perspectives all with the goal of more deeply understanding the USCG perspective.

Case Study Evidence Source: In-Depth Interviews: Participants

The focus of my research question required both purposive and snowball sampling (Berg, 2009). My initial list of participants was drawn from my review of USCG documents. I contacted those participants to select candidates for my research and then asked them to recommend other USCG members who they felt would contribute. Hundreds of USCG men and women took part in the response and dozens in the response and communication process, so I harnessed the experience of the members I initially contact to determine the best candidates to interview in accordance with Berg's description of a snowball sample. Though a snowball sample may be limited by the knowledge and experience of my participants, I believe that the USCG response was structured specifically enough that response leadership maintained full awareness of all responding parties within the organization. USCG members are spread throughout the country, and the high operational intensity of the Haitian earthquake response drew in supporting personnel from across the organization, so I did not limit my participant selection based on geographic proximity.

My recruitment in Haiti began prior to my arrival in the country. I traveled on official diplomatic orders as a USCG officer, communicating with the US Embassy and the Military Liaison Office prior to my arrival. My first three weeks were spent volunteering with a British NGO in a project completely unrelated to any USCG missions, in a town approximately three hours by bus away from the

US Embassy. After the third week volunteering, I returned to the capital city and began my interviews.

My USCG and HGO interviews were conducted with the support of USCG personnel working at the Embassy. Responders I spoke with referred me to other USG agency officials who had participated in the response. Additionally, I had networked with a variety of US-based NGOs with experience in Haiti that preceded the 2010 earthquake. I met with and interviewed several representatives from those NGOs. All of my interviews conducted in Haiti were face-to-face.

Overall, I spoke with 22 people in 19 interviews. 16 interviews were one-on-one and three were dyads. My two interviews with HGOs were each dyads, but a USCG official was present because he was the one who had introduced me and to the participants and provided me transportation through Haiti. Each interview lasted between 45 minutes and two hours, and all were conducted in English. The majority of my participants were directly involved as either a responder, a communicator, or a partner in the USCG response. I felt that I was able to reach theoretical saturation in a number of areas concerning the USCG response, and was able to triangulate many of the concepts using my interviews with non-USCG responders (Glaser & Strauss, 1967).

Case Study: Evidence Gathering Procedure

I utilized an interview protocol for my data collection. Rubin and Rubin (2005) stated, "interviews are structured conversations," and a protocol "[gave] guidance on what main questions to ask, and of whom" (p. 147). The protocol enabled me to branch out as needed, personalizing my approach to each

participant without fear of losing my central thrust of inquiry. My interview protocol covered four phases. Phase one gathered basic demographic information about the experiences and background of the participant. Phase two solicited a "grand tour" of the post-earthquake response to establish a rough timeline of what occurred when. Phase three explored specific decision points in the response process and the factors that informed those decisions. Phase four, returning to the overall tour, addressed successes and lessons learned in the response. I included a series of probes and potential follow-up questions in anticipation of any evasiveness, uncertainty, or reluctance to share information (Berg, 2009). The protocol consisted of open-ended questions that could be reworded or reorganized. I solicited explicit permission to use audio-recording prior to all interviews, and took notes during and after interviews to capture my own thoughts and have a back-up record of the conversation.

Case Study: Data Analysis

I pursued data analysis, "the process of moving from raw interviews to evidence-based interpretations" (Rubin & Rubin, 2005, p. 201), throughout my data collection phase. My preliminary analyses consisted of journaling and discussion with my colleagues, as Berg (2009) emphasized, analysis "cannot be completely straightforward or cut and dry" (p. 147). Rubin and Rubin identified the two phases of my formal analysis process: in the first phase, I prepared and coded transcripts with respect to concepts, themes, and events. In the second phase I compared concepts and themes across interviews to work towards the research question. In the second phase, I engaged in pattern matching, which involved comparing accepted and tested patterns with patterns that I believed to

exist in the data (Yin, 2009). This allowed me to determine if either of the theoretical frameworks I chose fit the data, or if a new explanatory theory emerged.

Phase One: Transcription, Timeline, and Coding

I fully transcribed each interview by hand, completing transcription of seven interviews before traveling to Haiti and conducting the remaining 12. Rubin and Rubin (2005) suggested that mid-collection transcription would help me prepare for subsequent interviews. Each transcript was supplemented by handwritten memos taken during and immediately after the interviews. These notes addressed any non-verbal communications I observed, strong emotions or ideas triggered during the interview, and thoughts on themes, concepts, or ways in which the interview related to others previously completed. Using a systematic sorting process and an interpretive approach similar to those outlined by Berg (2009), I sorted and indexed each transcript by major topics, subtopics, and emergent characteristics.

Once I completed transcription, I constructed a compiled narrative of the USCG response timeline. I combined information from the interviews and the documents provided by the USCG historian's office, attempting to triangulate as many data points as I could. I also included data from my interviews with HGOs. This timeline was critical for my analysis of the USCG communication response as a complex system.

I developed codes through both manifest and latent content analysis (Berg, 2009). To do this, I conducted a close reading of the transcripts, going line-by-line to discover repeating themes, concepts, and words (Strauss, 1990),

noting deep structural meanings conveyed by the messages (Berg, 2009). I analyzed my transcripts through both induction and deduction. Induction, as labeled by Berg, is similar to the practice of open coding: immersing myself in the transcripts to identify dimensions or themes. Deduction, on the other hand, utilizes the theoretical perspectives described in my review of literature to create a scheme of categorization. While coding I was constantly on the lookout for new categories to add to the coding structure (Rubin & Rubin, 2005). Coding required me to put aside my preconceived notions of what the data contained (Corbin & Strauss, 2008).

I coded my documents digitally. I used my interview questionnaire as the first level of analysis, compiling all applicable responses from my interviews into a single document structured like an interview. Following that, I categorized each response by the themes, concepts, or phrases they contained. I used a grounded theory approach to discover emergent themes, and also used codes based on the theoretical frameworks I chose. A final document sorted responses into the appropriate categories. The themes subsection of my findings section highlights the most important and best-supported themes I found in the first phase.

Phase Two: Pattern Matching

In the second phase I compared the individual interviews across several axes to discover patterns, themes, and shared opinions. Following that, I performed a comparative analysis of the interviews across the sample groups (Corbin & Strauss, 2008). The sorting process completed in phase one facilitated the comparative analysis, as did my reflective memo writing throughout the data collection and coding processes.

Analytic induction, as described by Berg (2009), combines the post-coding data analysis with theory integration, an advancement of the grounded theory approach first described by Glaser and Strauss (1967). Analytic induction allowed me to simultaneously scan for support of the established theories while also maintaining openness to the development of new theory by pattern matching, which "compares an empirically based pattern with a predicted one (or with several alternative predictions)" (Yin, 2009, p. 136). As I answered the research questions, I considered how complexity theory, the STPS, and any emergent theoretical explanations helped to explain the trajectory of the communicative response (Corbin & Strauss, 2008).

The process of interrogative hypothesis testing utilizes the negative case test, where a hypothesis is created based on observation or theoretical prediction and then applied to the data until a case that does not fit the hypothesis is located (Berg, 2009). Upon finding such a case, I either reformulated or discarded the hypothesis in favor of a rival explanation (Yin, 2009), repeating the process until my hypotheses no longer produced negative cases. In deference to Berg's warning that this process may neglect contradictory evidence or distort the initial hypothesis, I attempted to triangulate my findings with multiple instances and discussion with colleagues. Integration was rigorous because I considered two established theoretical perspectives and also theoretical concepts that emerged in my review of the data. I had to fit a surfeit of data into the frameworks, recognize when organizational schemes are not working, and ensure the analytic story "felt right" (Corbin & Strauss, 2008, p. 274). The Themes to Theory section in my Discussion and Conclusion section discusses

Validity and Reliability

Validity justifies the efforts of a scholar, and reliability insures it. Kvale (1995) addressed pragmatic validity in the context of communication research, promoting rational argument and consensus while cautioning that overemphasizing validity would result in stagnation or excess uncertainty in representation of findings. Kidder (1981) highlighted the requirement of reliability in the planning and execution of research, identifying three criterion for establishing validity: construct, internal, and external validity. Kirk and Miller (1986), describing qualitative research validity, labeled these theoretical, instrumental, and apparent. Construct or theoretical validity is drawn from the operational measures identified for the concepts in the study. Construct validity is easily identified and measured in quantitative studies, but case studies do not provide p values. Berg's (2009) discussion of triangulation is salient, and his exhortation to "obtain a better, more substantive picture of reality"(p. 5) speaks to the intent of construct validity. I addressed Berg's conception of triangulation by tapping the perspectives of both the USCG and some of its publics, and also by learning about parallel response processes that were occurring in the same post-quake environment. Additionally, my inclusion of a document review provided additional lines of sight on the process, as did member-checking with participants as I developed concepts. Kirk and Miller posited that field research is a useful validity check – allowing participants an opportunity to help define terms and adopting the language they use when communicating with other participants can help ensure a uniformity of definition throughout the interviews.

Internal and external validity address the research instrument and the generalizability of the study. A poorly calibrated instrument cannot be expected to provide worthwhile readings, and the same can be said of a poorly planned or written interview questionnaire (Wolcott, 1995). Kidder (1981) presented the ability to rule out rival explanations as a test of internal validity. While this goes against the reluctance of complexity theory to posit linear causal relationships, I believe that the more general process of matching observations to theory spoke to this topic. Kirk and Miller (1986) identified that "a measurement procedure is said to have instrumental validity...if it can be shown that observations match those generated by an alternative procedure that is itself accepted as valid" (p. 22). The inclusion of previously accepted theories to match my research developments drew from this practice, which ties in with Yin's (2009) suggestion of pattern matching as a method to increase internal validity. Despite that, I acknowledge in advance that this study, similar to any post-hoc case study, was not able to assert with certainty that the linkages are valid.

External or apparent validity concerns the ability of a researcher to apply the results found in a specific case study to other cases (Kirk & Miller, 1986). Berg (2009) boldly dismissed the charge, asserting instead that there "is clearly a scientific value to gain from investigating some single category of individual, group, or event" (p. 330), with the qualification that if we assume that human behavior is to some degree predictable, then case studies have value ipso facto. I am approaching this study from the perspective of complexity theory, which is a post-modern theory that problematizes the idea of generalizability. The historically situated nature of the Haitian earthquake means that future disasters

will not progress in the same manner, and that identical actions taken by similar responders in a similar situation would not necessarily, or even could not possibly yield the same results. Though I contest the necessity for broad generalizability in a complex world, I do recognize the value of analytical generalizability. Analytical generalization is defined by Yin (2009) as the application of particular results to an extant, or just generally broader theory. The process of analytic generalization occurred first in my post-interview memo writing. I conducted an extensive review of the two theories prior to beginning my research, and applied each to my conversations to assess how new data matched or failed to match the frameworks laid out in theory.

Reliability is similarly problematized in a complex environment. Reliability calls for a study to be repeatable in similar circumstances but different contexts. A complex system, historically situated and non-linear, cannot be expected to follow the same path as a previous system, or even the same system, given similar starting conditions. The challenge of reliability is not new to the field of qualitative research; people and their experiences are unique, and when viewed in rich detail, phenomenon are rarely identical. Despite the stated reasons against reliability concerns, I am encouraged by Kidder's (1981) emphasis on repetition of ideas and concepts versus actual study designs and conditions because the ideas and concepts of complexity theory are more similar to the patterned strange attractors than the specific details of an event. I worked towards reliability through procedural consistency, heeding Yin's (2009) advice to conduct thoroughly operational and systematic research capable of standing

up to an external audit, or providing acceptable responses to an educated interlocutor.

Reflexivity

Though I could trace influences earlier, for the purpose of this research I will share that, for the past eight years, the military has trained me as a leader, a manager, and a law enforcement officer. While each of these positions carries with them a lingering flavor of qualitative research, I do not believe that they are appropriate frameworks for academic study.

To begin briefly, I will describe aspects of my personality and life that I feel may affect my research, and steps I took to minimize, or at least account for, their influence. I am a 26-year-old Caucasian male born and raised in New York City in a middle-class household. I attended public school throughout my childhood, earned a bachelor degree of science from the USCG Academy in 2006, and spent the four following years working on USCG ships around the country, in South America, and in the Caribbean. I remain employed as an officer in the USCG, and my enrollment at the University of Maryland and research trip to Haiti were funded through the USCG's postgraduate program. My research topic was selected based both on personal interest and on its applicability to the USCG's mission and knowledge base, and following my graduation I will work as a Public Affairs Officer, where I may be tasked with a disaster response similar to the one I studied.

This study of my own organization fit Creswell's (2003) label of "backyard research." Rubin and Rubin (2005) emphasized the importance of researchers understanding internal biases or strong personal feelings that could distort what

they hear or how they approach interviews. Throughout my research I relied on Berg's (2009) assertion that "the researcher understands that he or she is part of the social world(s) that he or she investigates" and, in addition to reporting on experiences in the field, "actively constructs interpretations...and then questions how those interpretations actually arose" (p. 198).

All of my participants knew that I was actively employed by the USCG. In my interviews with USCG personnel, this frequently resulted in assumptions of shared knowledge that I attempted to fill in when presenting the results, including acronyms, procedures, and the general organizational knowledge of the USCG. Several participants suggested that "I know how it is," because of my history as a USCG officer and because I went through the USCG Academy. In the context of the interviews, I felt that they were right, and tried to integrate my knowledge into the data they provided for a more holistic presentation.

In my interviews with HGOs, I felt that my status as a USCG officer severely obstructed the data collection process. I feel that conducting the interviews in English instead of Haitian Creole further exacerbated this obstruction. I had been warned by almost every American that I spoke with prior to beginning my interviews that Haitians were very reluctant to offer criticism of foreigners in front of foreign audiences. To attempt to alleviate this reporting bias I aggressively pursued my interview protocol in our conversations, reframing and asking questions repeatedly throughout the course of the interaction and trying to find ways to solicit critical information without making the participants feel like the were being critical. For example: I wanted to ask participants what they felt the USCG personnel could have done better, but their initial response was

"nothing." Instead, I asked them to offer advice to future USCG responders on how to respond in unfamiliar cultural situations, even requesting they role-play, positioning myself as the responder in question. This method solicited more responses.

My findings were also influenced by a USCG response official who accompanied me on all of my interviews with HGOs. The reason he accompanied was mostly one of convenience: he provided transportation, introductions, and cultural translation, and he out-ranked me so it was difficult for me to ask him to leave. There were many times during the interviews where I was grateful for his presence because he was able to form probe questions to dig towards the information I needed. Despite that, I often felt, based on the circumstances, body language, furtive glances made by participants, and the phrasing of their answers that his presence further limited their willingness to offer criticism of the response, constructive or otherwise. I am hopeful that the efforts I made to ask and re-ask questions to circumvent their reluctance overcame any limitations imposed by his presence.

My process of self-reflection began before I enrolled at University of Maryland, when I wrote journal entries questioning my role in the alien migrant interdiction operations conducted by the USCG cutter I worked on in the waters separating the U.S. and the Caribbean. It continues in a more formalized setting in the present. My memos and journal, written over the course of this study, trace the progress of my thoughts, serving as a barograph of my emotional state. I believe they nurtured critical inquiry and problematized and dispelled harmful, limiting assumptions about the research, the subjects, or the topic. While I do not

believe that objectivity is possible, I am hopeful that the differing perspectives I

gathered, the contemplative data analysis I undertook, and the process of self-

reflection I carried through my research have treated my data fairly and allowed

the embedded meanings to emerge.

Chapter 4: Results

RQ1: How did the US Coast Guard shape and implement crisis management with its publics?

The goal of my first research question was to reconstruct the communicative response timeline from operational communication, informational communication, and HGO perspectives. I viewed the response as a complex organizational system, and so I wanted to chart its development and critical decision points so that I could identify influential forces. I drew data from a variety of sources: I asked USCG participants to narrate their experience of the USCG response, examined approximately 2000 emails, presentations, and documents from the USCG archive, and spoke with HGO personnel who partnered with the USCG.

Over the course of my interviews, I noted two primary axes along which their answers fell. The Coast Guard communicative response developed in Florida and Haiti, and USCG participants identified important communication structures at an informational and operational level. I also observed that the driving forces influencing the communicative response shifted with the passage of time. In the early stages of the response, needs assessment, internal communication, and integration were the primary operational communication concerns, and image control and telling the CG story were the primary informational communication concerns. Awareness and deterrence campaigns related to mass migration were both operational and informational communication concerns. Later, communication centered on restoration of

infrastructure and local capability. My discussion of the crisis management response is divided along those axes. I also found a fascinating narrative of organizational response, but because my focus is communication, I have placed additional findings in Appendix G.

I asked participants to assess their observations of the communicative response, comment on how communication plans translated into execution, credit successes, and posit lessons learned. My goal was to see how participants reacted to an unpredictable event – neither Americans nor Haitians anticipated an earthquake striking Haiti. Most participants initially replied that there was no plan or that existing plans were insufficient, but further discussion revealed the presence of response frameworks that were adaptable to the situation. They also reported specific characteristics of the response organization, *adaptability, flexibility,* and a tolerance for *autonomy* that enabled the vague or non-existent plan to develop into a meaningful response framework that both provided disaster relief and empowered the HGOs to resume control. Equally important were concerns that participants identified, lessons learned that could have delayed the goals of the response.

A note on nomenclature: because my interviews included personnel in both the operational and informational response, I have selected the terms responder and communicator as descriptive labels. I also use participant more generally when the distinction of role is less important, and I use response to describe the overall action taken by the USCG in the aftermath.

I aim for this section to provide a geographic and organizational tour of the communicative response, beginning in Miami, FL on the night of the earthquake with a discussion of how the operational and informational responses took shape, and then heading south to Haiti. Communicators arriving in the country to establish a Joint Information Center (JIC) and integrate into a Joint Task Force (JTF) were confronted with horrific scenes, and then were tasked with building a joint response between military and civilian USG agencies, reaching out to devastated Haitian publics, and responding to the perceptions of an international audience. I conclude the section by highlighting four concepts that were present in the responses of both communicators and responders in Haiti and Florida: *flexibility* and *adaptability*, *autonomy*, and *information sharing*. Most responders highlighted these concepts as instrumental to the success of the communicative response. Cultural sensitivity and image control also emerged as closely linked themes, which I address in my third research question.

Florida, Informational Communication Response

In Florida, the informational response began the day after the earthquake with the establishment of "basically what was a [JIC], but it wasn't at the time," because it was staffed exclusively by the existing local USCG communicators working in Florida with minimal input from other agencies. The primary focus of this center was media inquiries, which began almost immediately after the earthquake and required around-the-clock staffing. When the formal JIC was formed in Haiti, the two centers worked in unison, though the Haiti JIC was the primary source of strategic guidance.

The geographic separation between the communicators and the scene of the response presented unique challenges, exacerbated by the crippled communication infrastructure. As a first step, USCG communicators coordinated with operational USCG forces to perform PA functions before more formally trained communications personnel were able to enter the country. Communication challenges persisted even after communicators arrived in Haiti. They had to manually transfer digital data via the continuously operating relief flights until internet access was restored.

US media crews were on the ground and broadcasting within days but response communicators in Florida ignored media reports, instead relying on direct questions and fact checking to collect information. The early USCG communication structure did not have the personnel capacity to simultaneously generate content and scan media. What they did observe, they judged as presenting a distinct media bias, as one senior official stated,"[media] were not helpful because they weren't truly telling a balanced story."

A parallel communication response was also taking shape in Miami under the title of the Homeland Security Task Force, South East (HSTF-SE). The task force, initially only five members strong, was a joint effort between several Department of Homeland Security (DHS) agencies. Tasked to prepare for a rapid implementation of a potential mass migration plan, the HSTF-SE initially sought to keep a low profile, in the words of one USCG official, they "didn't want to dilute the message of the humanitarian aid that we're providing to the country."

The ongoing humanitarian response influenced communicators to keep quiet about the preparations related to mass migration. Had the plan been activated by an actual mass migration, the communications function would have begun broadcasting as soon as possible. Since no mass migration was occurring, and since public sympathy was directed towards Haiti, communicators wanted to prepare the plan with minimal public attention, both to keep focus on the important work being done by the humanitarian responders. One communicators explained he, "would be sending mixed messages if I was also talking about, 'we're going to repatriate you and…we're going to interdict you at sea, and you're migrants.'"

The Task Force was compelled to publicize their efforts in response to a photograph of a severely overloaded Haitian ferry. The photo prompted fears of mass migration in South Florida, in part because of past USCG efforts to raise public awareness:

> South Florida knows all that stuff. Beat it in their head for the last couple of years. Through our exercise series Unified Support, through our talks about preparations for different exercises we had, working with the media - there's even a mass migration media pool we established in Florida just before that, so once they saw that the media inquiries started to come in to the task force, there was a brief but very intense period of time where we were having to kinda walk everybody back from the ledge and reassure people that the next mass migration was not happening.

Once the public was reassured that a response framework was in place, the

HSTF-SE withdrew from the public eye in favor of the response effort overall.

Haiti, Informational Communication Response

The Coast Guard public information response in Haiti occurred under the

umbrella of the JIC, whose first point of organization was the JIC Forward, a

media operations center set up in the airport. The JIC combined military,

government, and US NGO communicators to deliver a "coordinated, integrated,

and synchronized" story of the US response. A senior USCG leader served as one

of the deputies in the response, starting at the Port au Prince airport to organize

media relations. The USCG, in addition to communicating its own story, was

tasked with focusing on all aspects of the USG maritime response, including the

medical ship USNS COMFORT, the marine engineers known as the "SeaBees,"

and all maritime rescue operations. Both the JIC and the parallel USCG

information structure in Florida grew as the response did. Contrary to the

bureaucracy of the organizational response, which was perceived as stifling, the

hierarchy of the JIC was reported to be beneficial. A communicator from the JIC

explained the process:

> As news came up you'd draft something, gotta get an on-the-ground
>
> coordination between all those organizations, then you can push it to DC
>
> and say, 'alright, give us the national thumbs up on this and we'll start to
>
> use it,' and then push it back down and then daily, a set of JIC talking
>
> points were produced and were sent to all the participating USG entities to
>
> include us in the JTF.

A senior JIC communicator highlighted several focal points of the JIC response: *Visual storytelling* was key, both directed at the Haitian people and at American media outlets. He used the phrase *timely reporting* to describe the controlled flow of the response narrative to keep media focused on accomplishments of the response as they occurred instead of shortcomings before they could be addressed. The USCG story and the USG story were considered the same: all individual agencies were tasked to report their progress nested in the overall narrative of the USG, and were to emphasize the *humanitarian nature* of all efforts. This coordination was a difficult task, in the words of one JIC communicator, "trying to gather up all the cats and dogs PAOs and PA assets that are out there that come in at the unit level who quickly want to do some good stuff but can quickly get misaligned message wise."

Sensational reporting practices of US news media threatened to derail the USCG communications effort, as one communicator reported:

> Journalists that were in the area that seemed to find things that nobody else would be able to find, like the one riot in the city...and grab attention to those little things that maybe showed Haiti in a different light than what we were actually seeing it while we were there.

The majority of participants identified "politics" as a driving force of the response effort, but I interpreted their descriptions to be concern about the image of the response. Several participants described overtly political issues: outrage against Haitian President Rene Preval's lack of public statements or suggestions of a US invasion from Venezuelan President Hugo Chavez. A senior USCG official described politics between responding countries as a barrier, also highlighting

concerns about whether the response organization had jurisdiction to operate in Haiti and echoing the sentiments of several participants:

> It's important to save lives and end suffering, but in many cases big level politics is what it's all about...'here's the lines, everybody plays within their lines' because we're all responding and helping out Haiti, but we don't want...negative interactions. It's all about what's the authority.

Members of the Haitian Coast Guard provided an additional perspective on this concept:

> If I have a neighbor, a neighbor who has some problem, I'm going to help, first of all, because this is a human being, but at the same time I'm going to help because I am a neighbor. I have a face to save. The same thing applies for people, and then for the country that help.

Jurisdictional questions affected the different components of the USCG response to varying degrees. Communicators from the informational response reported no uncertainty regarding the justification of their presence in the country, while responders from the operational response frequently reported that they had limited jurisdiction, authority, or mandate.

The USCG played an essential role in defining the story of the US response, directly connected to image control. As one senior USCG official stated: "This couldn't become a bureaucratic 'where's the relief stuff' like [Katrina]...this needed to be a relief effort, not a security effort."
Not all US agencies contributed to this image, as observed by the same official: "The DOD message was 'we provided thousands of troops to help secure the

nation of Haiti.' That was the wrong message because all their troops were guarding rubble and there were tons and tons of supplies at the airport."

Communicators also expressed a desire to tell the USCG 'story' to both US and international media, and to the Haitian people:

> Making sure that the public knew that the Coast Guard was involved and knew what we were doing and knew that we were one of the first there and that we were doing things that were outside of what we were trained to do and we were overcoming those obstacles,"

exemplifying "traits that are in the Coast Guard heritage," such as "flexibility, adaptability, and humanitarian concern."

Telling the USCG and USG story was important, but one military communicator from the JIC clarified a concern about speaker identity, also motivated by concerns of image and politics:

> There's always a desire never to just have a US Military person standing up there talking about what's going on, but to have a USAID or a Embassy Country Team member, even better, have a MINUSTAH partner there and somebody else from the UN, depending on what you want to talk about. But you're not just giving the US military aspect of what's going on because we were only going to be there for a short period of time.

None of the USCG and USG participants stated a desire for Haitian representation in the response communications structure, despite the majority of communicators and responders explicitly stating a partner relationship instead of a subservient relationship between the US and Haitian government agencies.

Communicators in the JIC reported several features that fostered *flexibility* and *adaptability* in the unpredictable post-quake environment. Coordination between agencies was reached via routine meetings at a frequency of one or more per day. Routine meetings helped communicators from partnering agencies reach consensus and respond to emergent needs. This was essential because the military and civilian agencies did not have histories of formal coordination. The response of the JIC was "literally [bringing] everyone together and [saying], 'here's how we're going to do this.'" As a senior JIC communicator remembered, "we all agreed that we would have a single product, daily product, of talking points, top-line messaging. We determined that we would use a single set of numbers." Participants noted that the meetings did not guarantee accuracy, but rather that the unified messages would help focus media attention, "we gotta show progress, we gotta do things, but we all gotta be wrong together."

Daily meetings also helped identify emergent problems for the communicators to address, making it more flexible to changing needs. Operational responders were included in these meetings, which helped communicators choose what topics to focus on, a senior communicator gave an example:

This was us working with our operational guys to say, 'what's going on? And at what point do we want to start talking about the docks and what we're doing to fix it?' Because you don't want to take people out there and go, 'yeah, these are pretty screwed up' before you're able to do something.

The daily meetings included a partner that most PAOs were not used to working with. Military Psychological Operations, synonymous with Information

Operations (InfoOps) is considered the modern iteration of propaganda. InfoOps

capabilities were used in Haiti as a strategic tool for interacting directly with the

Haitian people, despite reluctance from military communicators. A JIC

communicator justified the decision: "When it's a disaster situation, it's not the

same thing as psychological operations during wartime." He saw this as necessary

for the communicative objectives:

> You can't just talk to the media and call yourselves strategic because...The
>
> media are not the only people talking to your audience...And oh, by the
>
> way, you're not the only person talking to that media. You got members of
>
> Congress, you got locals, you've got whatever. So if you're...just coming on
>
> through the media, you're not going to influence a damn thing because,
>
> because everyone else is going to walk right around you and they're going
>
> to touch all those other pieces and they're going to have a much stronger
>
> influence on that person that you're trying to reach

These capabilities were used to provide both helpful and cautionary information

to the Haitian public. Participants described broadcasts of health, safety, and

food distribution details and warnings to locals not to attempt to flee the country.

The JIC itself was credited as a success by both USCG and civilian

communicators, contrasting with the difficulties of coordinating other aspects of

the response. One responder noted frustration coordinating interagency

"operations and logistics and finance administration, but when it comes to public

affairs...I think we've got a model that's working." The USCG was able to

integrate into the JIC, as one non-USCC JIC communicator noted, the Coast

Guard was able to "[get] a lot of CG stories out and, but...understood that it

would start by saying, 'as part of the unified USG response to support the Haitian Government.'"

The PaP airport was an important central clearinghouse for information. In the first days of the response, thousands of personnel from dozens of countries arrived: professional responders, media, good samaritans, and UN forces. A responder contrasted the chaotic scene, "all these entities descending on one place... it doesn't have on a good day here what? Six flights? Maybe." But the convergence was beneficial, as a senior JIC official explained, "we had a lot of media that just literally came, camped out at the airport...We had a media operations hub out there." The hub of the US response eventually shifted to the embassy, but initially the airport was the necessary home of all levels of the response structure, including the JIC Forward, which set the procedures for media interaction that the US news media and JIC communicators would follow for the remainder of the response, as noted by one of the communicators: "Once you get your capability a little stabilized you can say, 'send all queries into the JIC and then we can figure out the right partner to be answering.'"

Haiti, Operational Communication Response

Perhaps the most chaotic aspect of the USCG response occurred on the ground. Most of the lead USCG responders were in the country during the earthquake. Responders previously familiar with Haiti found their experience served as a communicative shortcut for needs assessment, as one related: "Having been in the middle of it and having known the country, I knew what they needed from my area of expertise: the ports." Responders I spoke with who had

not been in the country before reported higher levels of confusion and lower

levels of information availability than their counterparts with more familiarity.

But, as I experienced in the time I spent working in the country, the constant

crush of daily urban chaos eventually recedes into the background. While

responders can not be inoculated against the stimuli of a disaster-stricken

country, a general understanding of life in a foreign place will always be of

benefit. As one experienced CG responder put it, "it took people who knew how to

get things done in Haiti for us to get things done in Haiti."

Many USCG communicators attributed some of the Coast Guard's

communicative success to operational decisions in the hours following the

earthquake:

> The things that we did at the very beginning of the response, that first
>
> night, that second night, really shaped the response for us as
>
> communicators. Had we not put out a press release right away saying that
>
> the Coast Guard was already moving assets and was responding, then we
>
> may not have been looked at as a go-to agency for information off the bat
>
> and so we needed to do that.

The Coast Guard was seen by participants as a, "federal first responder," uniquely

situated to "get in there fast...do our thing, and then..turn it over to someone

who's got bigger and better capabilities."

A responder with several years of experience in Haiti summarized USCG

concerns of needs assessment and restoration upon arriving in the country:

> We wanted to know if the Haitian Coast Guard was still operational. We
>
> had heard reports that half of them were killed...And we wanted to verify

the status of the port authority and start the process of getting them, if we can, help them get back on their feet and start moving humanitarian cargo as early as possible.

The most pressing early operational communication concern reported was communicating the logistics of the humanitarian response process. A JIC communicator described the early mission, "our job was to get in and rapidly enable all these international organizations to be able to provide humanitarian assistance in this crisis."

Participants agreed that, initially, the manifestations of USCG assistance were not working in concert: the Cutters in Port au Prince harbor were running triage operations out of the Killick HCG base; the liaison officers working at the embassy were coordinating medevac flights on USCG aircraft; and a team of responders allied with FEMA had just landed at the airport with the goal of restoring the city's port infrastructure. The USCG had to communicate internally in order to unify as a service and as part of the larger response effort, integrating with larger USG forces as well as non-governmental organizations.

The USCG was obligated to communicate with agencies typically outside of its sphere of interaction because the Haitian government had requested that the US Government, "'send us everything you can," as one responder explained to me. The response plan in Haiti, though pre-defined in very general terms, did not provide solid lines of communication and organization in the beginning, though that may have been useful because responding agencies were still going through the process of figuring out needs, responsibilities, and interactions. A responder said the lines, "probably needed to be blurry, honestly. I mean, too much rigid

structure in a chaotic environment like that might've been too much."

Another USCG responder initially eschewed the constraints of a communication plan, suggesting:

> You don't have a set protocol for this, when you're in a position like mine. There's just intuitive things you know you need to do...it was those kind of things that, having experience down here to know there could be issues, it's something you identify and handle it as best you can, notify the people that are going to find it important, and then move on to your next, the next thing that occurred to you.

The same responder maintained his perspective even after a more formal plan was in place, suggesting that the emergent response framework still depended on flexible independent communication to succeed:

> When anybody sits down and you have these huge tabletop meetings and they're like, 'OK, you do this and you do this and you do this,' there's got to be that person that's standing back, listening to it all, coming up to somebody to say, 'hey, I can help you with that, I can help you.'

Most of the USCG personnel I spoke with responded in a similar vein: willingly sharing information and expertise with other members of the response, and often going beyond their assigned duties to do so.

Operational Restoration

The earthquake crumbled interpersonal relationships as well as infrastructure. Both needed to be rebuilt in the weeks and months that followed. Almost all Haitian ministry buildings collapsed in the quake including the Presidential Palace, removing the geographic hubs of governance. Many Haitian

officials were killed as well, destroying the human base. Most of the heads of the maritime HGOs survived but they were forced to find and adapt to new working environments while participating in the multi-agency effort to reopen the port. Following the port opening, the USCG responders had to, "work themselves out of a job," as one responder stated, by returning Haitian agencies to control and building capacity to receive aid. Most USCG responders arrived "without an end in mind plan...we didn't know what our exit strategy was immediately, but we had to develop it on the fly."

The responders' desire to work themselves out of a job served as sufficient impetus for communicative action, helping organization to emerge in the restoration of the port infrastructure. Responders reported that the routine daily meetings contributed to this cause. In the words of a responder, the USCG was uniquely positioned to facilitate the process, "because of the nature of who we are and how we've done that mission in the past we kinda had some corporate knowledge on how to do it best."

A similar perspective was expressed by an official in the PSU, tasked with restoring the Haitian Port Security function. His unit developed and implemented a training program to help Haitian Port Security workers handle the unusually high influx of vessel traffic and he noted that "they really appreciated it because they felt like they had ownership of something. And they were actually proud, never before had it been done. They were treated like men, treated like adults, individuals that could do it."

I explored a different approach in conversation with UN organizers. The UN agency I spoke with had built an ongoing relationship with a Haitian logistics

agency of a similar size and circumstance to the agencies with which the USCG was interacting. The agency had lost its facilities without losing any of its human capital. The UN official explained the situation: "Basically they're still staff of this agency even though they work for us. We reimburse them, the totality of this staff are here working with us…and at the same time we do on the job training to arrange and load up capacity." The primary difference I observed is that the UN is still present, still involved in the administration of the independent Haitian agency while the USCG returned its presence in the country to pre-earthquake levels and the agency it supported is generally self-sufficient.

Emergent Themes

Flexibility and Adaptability

The Coast Guard's integration into the overall response structure was facilitated by communication *flexibility*. Participants described *flexibility* as the ability to communicate with different partners, both civilian and military and both US and Haitian. This *flexibility* bolstered the USCG ability to meet emergent needs, and was caused in part by the ease with which the Coast Guard's reached "into the organization and find people quickly that could be, that could effect change positively because of what they know and what they've done and employ that resource." As one senior JIC communicator explained: "You can't have 100% of your location staffed by your best people, just, it's an impossibility, so when a major event like this happens, you need to say, 'this is so important we've got to send our best people down there.'"

"Reach back support," as it was labeled by several responders, included more than personnel to communicate on the ground. Participants described, "groups setting up websites, groups back [in Washington, D.C.] helping gather information," and a team within the response structure that:

> Took social media…to an operational level… to bring operational resources to people who needed them. People were still tweeting and still texting in Haiti, and many of them were tweeting that they needed help…so we're able to take real, almost real-time intelligence from social media, give it to the operators, and give the operators visibility on a need they may not have known existed, and move that aid directly to where it's needed most, and in a fairly rapid fashion.

Off-scene support was critical because on-scene responders were extremely burdened with communication and response duties, as one Haitian-based USCG responder said, "It's not just like I was doing, it's not that anybody here was just doing one thing, we're all doing multiple things at the time and juggling a lot of different priorities."

Lacking local familiarity, the response force was significantly bolstered by the arrival of the few Coast Guard officials with experience working in Haiti. At any one time there are only two to three permanently stationed Coast Guard officers in the country, though training teams and cutters have made frequent port calls, as well as temporary forces after the 1994 U.S. invasion and restoration of President Aristede. A USCG responder described the benefit of finding and drawing in these experienced personnel, "we adapt to the environment, surge resources appropriately…I think we valued anyway the right expertise to be a

leading edge of what we wanted to accomplish in Haiti." This strategy was espoused by several other agencies, including officials I spoke to in the DOS, UN, and the NGO community, some of whose members flew in from around the world to help.

The majority of USG personnel arriving in Haiti had not worked in the country before. Responders with experience in the country generally noted this as a hindrance, noting the:

Need to augment our folks who are down range without replacing them...the CG people who were deployed downrange, the coordination with people already downrange...could've probably been improved...You're also dealing with people who're directly impacted by the event who were now put in the position of coordinating 20, 30, up to 100 people who they didn't request and didn't really know what to do with and didn't have any control over.

Conflicts of this nature may be unavoidable because the minimal USCG presence in Haiti provided limited opportunities for personnel to gain experience working in the country. In general, participants felt that the USCG response put the existing experience to good use. Many participants noted other US agencies operating in the response structure where the arrogance of responders lacking experience in Haiti hindered coordination with responders already on the ground.

Integrating the responding agencies was difficult because of incompatible response plans and organizational languages. The USCG helped bridge many of the gaps. Many USCG responders gave personal examples of organizational

flexibility, as one explained, "I straddled the line between…Coast Guard Liaison to the Joint Task Force and being the person back to that DHS component, where FEMA and…those folks were working."

Several participants identified communications practices that threatened to limit their *adaptability* to emergent conditions, specifically the burdensome bureaucracy created by the plethora of government agencies. Most participants agreed that the USCG was more comfortable making localized decisions with with the available information, while other USG response assets required a more rigid communications structure and higher levels of certainty. As one USCG responder described to me:

> The culture in which decisions are made is vastly different. DOD and DOS are very different, culturally speaking… that's where the USCG kinda rides the line, we kinda hop on both sides of the fence very capably, and I think that's where we were used quite often was to stitch some of the seams together.

This contrasted with the bureaucratic culture of involvement described by another responder as dangerous to the fragile organization:

> Everybody feels that they have to have participation and a say in everything that goes on. And there's some things that you can just let other people handle and not get involved in. It doesn't mean that you don't care about the final outcome, but your participation is not warranted, necessary, or even helpful.

A UN responder's joke about communications around the integration effort summarized many participants' perspectives: "It's a big ugly monster to try to wrap your hands around, best to let it alone."

Autonomy

Responders both in and external to the USCG credited the USCG Cutter TAHOMA with setting the image of the humanitarian response. TAHOMA's captain, utilizing his past experience as a Liaison Officer in Haiti, led his crew ashore the morning after the earthquake without formal authorization to provide much needed medical response. *Autonomy*, defined by responders and communicators as the ability to set communication and response priorities, choose who to communicate with, and choose how to complete assignments, was touted as a privilege of experience. Communications were limited by the significant security restrictions placed on the inbound USCG forces. Disregard of security restrictions was almost absent from the narratives of responders without previous experience in Haiti. Although experienced responders described the restrictions as "ludicrous," they also acknowledged their necessity for the safety of responders with no local familiarity.

A responder with previous experience in Haiti that arrived with FEMA related an example: "I immediately removed myself from that group and grabbed [the group leader] and said 'look, you want to communicate with the right people? Then I need to go and do what I know how to do'" This responder circumvented security regulations to successfully reach out to important publics:

I drove cars at one o'clock in the morning without any weapons on me or anything, with the whole purpose of trying to get people what they need...

during the day when the entire road system was just clogged with people

you can't move things around very effectively, so nobody knew the roads

like I knew them, so there was one person that was freed to be able to help

teams of US Government people outside of the DOD...to get where they

needed to be with the resources that enabled them to do their job because

people did things outside the rules.

Another responder associated autonomy with the experience he possessed:

You don't wait for somebody else to tell you what to do. You see a need,

you go fill it. It doesn't make you a hero, it doesn't make you any more

important than anybody else, but there comes a point where you realize

that you're that person that has the knowledge and can help out.

A third experienced responder echoed a frequent criticism of the excessive

restrictions, explaining mobility restrictions that affected the communicators and

responders ability to communicate locally:

If you wanted to organize a trip from 'point a' to 'point b' you've got to go

through the CG, the CG's got to go through FEMA, FEMA's got to go

through somebody else, and all the way up to the top, then it's got to come

all the way back down. By the time it's come back down from the top it's

too late, it's three days later. So the CG's used to making split second

decisions like, 'head over there, be back by six,' and we weren't able to do

that. That's what happens when you've got so many organizations trying to

work together.

Information Sharing

In the absence of rigid response frameworks, several participants identified forms of information sharing as an important cohesive element, contrasting the typically tight-lipped military organization to the necessarily free-flowing humanitarian one:

Because it was blurry, chain of command and sharing information happened on a need basis...people went and got it, people gave it. You're not working in a terrorist environment, you're working in a humanitarian disaster response environment and I think the DOD recognized that, they said, 'none of this stuff that we're talking about here is classified so I'm going to push it out and give it to whoever wants it.'

Sharing information helped agencies communicate before formal lines of communication were formed.

Language barriers impeded information sharing, but not how I expected them to. Though USCG communicators could only name a handful of Haitian Creole translators, they agreed that the English/Creole language barrier did not significantly hinder the response effort. They did note, however, a conflict in the language of the response structure between USG agencies. In the words of one responder: "There wasn't alignment with any elements...at either State or DOD, because...There's not a natural translation between the [DOS and DOD] Staff and the [USCG] staff." While this lack of translation initially limited interagency information sharing, it was resolved by communication outside of the response structure, or as the responder put it: "The [USCG staff] were also maintaining their day jobs too and that's when they would talk to their counterparts at SOUTHCOM." Several responders noted a similar solution, "honestly it's just face

to face decision making and creating." The response was routinely bolstered by responders and communicators learning to communicate outside of the boundaries of the response structures, and by organizational practices that enabled the growth to meet the emerging needs of the disaster.

RQ2: How did the publics of the US Coast Guard receive and respond to USCG communicative actions?

USCG communicators had to span a chasm between the first world and the third to help American audiences attempt to understand the human impact of the earthquake and the importance of the USCG's mission. Similarly, they had to help responders landing in Port au Prince make meaning of the devastation while adapting to an environment drastically different than the country they had flown from. The Haitian news media, HGOs, and Haitian public were the most important publics of all – responders and communicators needed to convey information critical to their survival, restore the infrastructure that millions of Haitians depended on for aid and commerce, and restore incapacitated HGOs.

USCG responders and communicators I interviewed identified numerous publics of the response, and while there may have been more publics I only used the ones identified by my participants. I did not ask participants to identify characteristics of each public they listed, but I believe that their selections are sufficiently granular to stand alone. My questionnaire asked three questions identifying publics, message content, and methods of communication. The responses are compiled in Table 1. In this section, I elaborate on the publics as perceived by participants, describe the methods and messages used to communicate with each public, and discuss the impacts I was able to assess. First, I will address unique considerations on message content, methods, and impact evaluation imposed by the crisis environment of Haiti.

Message Content

One DOS communicator I spoke to described being overwhelmed by

diverse stimuli when arriving in Port au Prince. She posited that the glut of

information caused overload and decreased the efficacy of all messages being

transmitted. I felt the same way during my month in the country: awash in a sea

of color, buffeted by crashing waves of traffic and commerce. The information

environment felt similar; a full 18 months after the earthquake I found public

information notices printed by the UN, USAID, the Haitian Government, dozens

of community based organizations and as many NGOs, and corporate interests.

Local cell phones buzzed constantly with messages from the Red Cross, the UN,

and various other organizations transmitting in partnership with the cell phone

companies. Though the content I observed was different from the post-quake

environment: cholera prevention, gender-based violence reduction, and political

campaign messaging, I was better able to understand why so many of the

responders and communicators I spoke with had emphasized the importance of

unified, synchronized messaging. Many voices saying a single thing is one way to

speak through the tumult.

I asked each participant what they perceived to be the message content of

the USCG communications effort. Because the USCG communicators were

embedded with the JIC and the JIC was credited with setting thematic order for

most USG communicators, many of the answers included the larger USG focus.

The quotes provided are not direct quotes, instead I compiled the perspectives by

theme, presenting the combined summary of their statements.

Communications Methods

The earthquake devastated communication infrastructure, significantly

decreasing responder access to information. Pay-as-you-go cell phones are

ubiquitous throughout the urban areas and countryside. Haitian men and women in red or green colored vests recharge phone credit at intersections and community centers. Two out of the three major cell-phone carriers (Digicell, the red vested company, and Voila, in green) ceased working within 30 minutes of the first tremblor and the third (HiTel) failed shortly afterwards. Coast Guard daily briefings tracked the cell phone availability in the days after the quake and cell phone coverage remained at or below 70% for the first week.

A senior communicator in the JIC summarized the issue facing response communicators, "you can't just talk to the media and call yourselves strategic." The communications response encompassed significantly more than media advocacy, and so more methods of interacting with the publics were necessary. Communications methods differed depending on the target public. Language played an obvious role in this, English broadcasts would fall on deaf ears in Haiti and Haitian Creole messages would garner no public support in the US, but cultural nuance was needed as well. Direct translation of messages does not always capture intent. Additionally, as one communicator noted, "a lot of the traditional methods that we kind of take for granted in the US, like broadcast cable or print media were not available. In Haiti you had to do things by radio, you had to do things by word of mouth." A participant described a "nation-wide game of telephone," "r*adyo trant-de,*" Creole for "radio thirty-two," in reference to the number of teeth in the mouth, is a local expression for the pervasive and rapidly propagating rumor mill.

Impact and Evaluation

I was able to speak with members from two of the identified publics: the HGOs and other USG agencies. My assessment of USCG communicative success with other publics was drawn from my discussion with USCG communicators and from the perspectives of other USG participants on the USCG response. The Haiti I visited, 18 months after the earthquake, was still in ruins. Hundreds of thousands still lived in tent cities, and food, water, health, and personal insecurity remained pressing issues. Though I lacked pre-quake perspective, most people who I spoke with who were familiar with Haiti said that it had only gotten worse. Claiming a successful response might ring hollow, but evaluation of specific actions is still meaningful and useful to future response efforts.

Publics

US News Media

The US news media was the first identified public of USCG responders in Florida and was also listed as a public by members of the JIC. Florida-based communicators offered a finer differentiation, suggesting that the South Florida news media was more sensitized than the national news media to the possibility of a mass migration. Although the differing concerns could warrant labeling them as a separate public, I have combined them here.

Message content directed towards the American people and International Community focused on the role of the US Government, and sought to present the image of the response as humanitarian instead of militaristic or imperial. The

communicators I spoke with generally agreed that the majority of the message content was set by the State Department:

> This is the federal government quickly and effectively responding to a humanitarian disaster by providing relief and supplies and helping people. We are enabling some of the efforts here but we are nowhere close to being in charge of these efforts...USG will provide anything and everything within our power that the Haitian government will accept to be able to help the Haitian people get out of the pending crisis and try to move down the road towards restoration. The next Mass migration is not occurring, but we are prepared if it does.

A USCG responder provided an example of communications that his team was trying to avoid, citing his perception of one of the DOD messages: "We provided thousands of troops to help secure the nation of Haiti."

USCG communicators employed traditional Public Affairs communication methods interacting with the news media, as one communicator summarized:

> We did a lot of hometown news releases. We also put out a lot of press releases. We put out packaged video stuff and we did a lot of interviews, from everybody on down from the largest national and international media to the locals as well. And then we also did a lot of embeds with national media, for instance we had Katie Couric on one of our [aircraft]...we used social media a lot, too. We brought in some social media experts to help us do that.

Communicators focused on visual aspects of the response and pre-packaged imagery and video content to make it easier for news media to incorporate it into their broadcasts.

Impact

I chose to rely on perspectives of the USCG and other USG communicators to determine the impact on US News Media. The Coast Guard did not have a very daunting task in winning news media support. As one USCG communicator observed:

> What [the Coast Guard was] doing was not a controversial thing. I mean, everything we were doing was really beneficial to the Haitian people and really beneficial to everyone - US citizens and Haitian citizens alike - with the exception of potentially repatriation, which did receive some critical comments.

This communicator described his department's evaluation process: a conventional media analysis tracking impressions, how much of the applicable articles were devoted to Coast Guard messages, and content analysis. He reported that the CG also tracked social media trends to get a more general awareness of the US public. Overall, he found a positive treatment of the USCG and USCG missions in his review. The USCG communicator with the mass migration task force also reported success, crediting the quick shift in media attention away from the mass migration plan to his effective communication of preparedness.

Haitian News Media

The Haitian news media became a public once the Haiti JIC was operational. They were treated similarly to their American counterparts, though special effort was made to translate press conferences and releases into Haitian Creole. Several communicators operating in Haiti noted that the Haitian news media were used to address rumors about the response. A senior USCG communicator said: "We take the [Haitian] media out to the [USNS Medical Ship] COMFORT... and show them that we're treating Haitians onboard because the rumor in town was only US citizens were being treated on the COMFORT." Although much of the Haitian news media is educated and bi- or trilingual, USCG communicators took specific actions to ensure that press conferences and mediated messages reached the majority Creole speaking population. To promote this, as a senior JIC communicator told me:

> Every press release we wrote was also translated into Creole and sent to the Haitian media so they could either read it or report it on radio. And then the same thing when you had a press event that were multiple times a day in the first week, to once a day, to several times a week as time goes past, but ensure that you get the Haitian media there, too. And if necessary, do two simultaneous press events so that the Haitian media can also get the story as well and not depend on just getting it in English and then have to turn it, turn around into Creole.

In addition to crafting the messages and holding multiple press conferences, communicators engaged with radio stations to garner support and dispel rumors. A senior JIC communicator reported, "We helped bolster the radio stations by giving them fuel for their generators so that they could be on air." This

public outreach was critical in gaining credibility for the USCG and USG

messages.

International/Caribbean News Media

Though the priorities of news media from Europe may not align with those

of Bahamian reporters, most communicators I spoke with lumped them together.

Communicators cited controlling the response image as one of their chief

concerns, noting competing suggestions that the US was invading Haiti. Mass

migration was perceived to be a concern of the Caribbean news media, prompting

the HSTF-SE to share response plans with them as well as with the South Florida

news media. Though USCG communicators mentioned these publics, they also

shared that much of the international news media communications originated at

the JIC, outside of direct USCG concern and influence.

Haitian Diaspora

Haitians in South Florida, New Jersey, Boston, New York, and around the

Caribbean were a primary target public because of their link to Haitians still in

Haiti. They exerted what one JIC communicator labeled, "a huge effect" on the

Haitian public, "because once cell-phone capacity was re-energized and fixed,

people were talking to family back here in the states, asking for help, finding out

what's going on." A USCG communicator reported that the USCG had built ties to

the Haitian communities in South Florida that proved beneficial to the

information response, especially in communicating US policies and the role of the

HSTF-SE to the Haitian public.

Haitian Governmental Organizations

Officials and workers in the Port Authority, Haitian Coast Guard, and Port Security were subjected to the same influences as the rest of the Haitian public, both mental and physical. Every Haitian government worker I spoke with reported a conflict of interests, divided between caring for their families and crumbled homes and assisting in the response, but the majority also reported going to great lengths to continue their service, as one member of the HCG told me, "I live a little far from here. I had to buy myself a bike to come here to help...And everybody did, in his or her way, did something similar to what I did."

USCG responders with experience working in Haiti reported giving extra consideration to their interactions with the HGO public to ensure that they supported the recovery effort without impeding restoration of the Haitian agencies to control. A locally experienced USCG responder explained:

[The USG/USCG response]... had to agree that these folks...could take over themselves by the time [the USG/USCG response] left. But, as the director general [of the HGO] says, it's a collaborative effort. They're always in communication....Some of these things are really integrated and some are separate, so it's a difficult question to answer. Because the answer could be, 'a month later they could do what they needed to do,' or the answer could be, 'we still need this.'

Many of the Coast Guard responders I interviewed described interactions with upper-level HGO workers. One responder, a senior USCG official, described a series of negative interactions with lower-level workers. This responder arrived two weeks after the earthquake, and as he observed:

> After I arrived it was at least a week [*before the workers showed up*]…
> *[they]* getting their families together, trying to get housing…where you and
> I being in the military, or somebody being a police or fire, they know at
> some point, 'OK, I'm working,' it wasn't that same attitude that I could see.
> They were taking care of their families, which, OK, I can see that…

When he noticed them back at work, he was disappointed to see, "they kinda
were sitting back kinda like, 'OK, you got it,' and we went with, 'Americans
(*laughs)* we're going to do the job, we're not going to sit around and wait when
you've got stuff that needs to be done and people that need to be served.'" Which
he explained:

> I guess we were a little bit more intense, whereas they were…by our
> standards laid back. I don't know if they were as concerned. I hope that's a
> fair statement, just from my impression, it was almost like, 'yeah, OK, my
> family's taken care of so I'm not worried about anyone else,' …content to
> watch us…we came with all this equipment and forces, it's almost by
> default that we just kind of took it because they weren't doing anything.
> You had ships coming in, it's like 'somebody has to be in charge of these
> ships coming in and making sure it gets where it needs to.' And they
> weren't doing it.

He attributed this in part to the lack of Haitian government control:

> Normally, the way it works in America, if you're responding to whatever
> state needs help, if it's federal help, you respond to that governor…But that

wasn't the case here, we were responding to nothing. So, we were not

going to sit around and wait, so we just kinda started reacting.

And, when it was time to return control to the HGOs:

The plan was to wean, to kinda move ourselves back and push them to the

forefront so they can start doing. It's your country, y'know? And before I

left, that's where it was… we started to train the port authority like, the

communications people, on radio communications. We would train the

security personnel just on port security and entry and exit security in the

port area. Haitian Coast Guard would start riding, and we were doing

patrols, joint patrols with them in order to get them back, once they start

coming back to work.

Responders focused on a message of agency in attempting to restore the

maritime transportation system. This message that they directed at the Haitian

agencies and private business owners, and was designed to prompt restoration of

local control was: "The sooner you guys get back in control, the sooner you can

charge what you want instead of the humanitarians using our services for free."

Many of my participants identified the the face-to-face interaction that

occurred daily at the port and the Coast Guard base as the most important

communication method in realizing the USCG's operational objectives. As simple

as this may sound, it was fraught with difficulty in the aftermath of disaster. A

USCG responder experienced in Haiti explained that the Haitians had "just lived

through a horror that only a few of us who've lived through earthquakes of that

nature might be able to…apply…people are looking at you with a thousand yard

stare." He had built personal relationships with HGO officials whom he saw grievously affected, "The port director came up to me... crying, and he was happy to see me of course, but his entire home was demolished and his family was living under a tree." This experienced responder's perspective echoed many of the other experienced responders', "you were doing therapy with someone just so you could get through that and have a conversation...and then we need to get down to business, we need to figure out how we're going to get this port up and running."

For these experienced responders, hierarchy and image were important: "How are we going to make sure that [the HGOs] are at the top of this food chain of decision makers so that the government of the United States is not seen like it's taking over the government of Haiti?" But it was also difficult to balance these needs, as one explained, "you're trying to respond and help them while you're trying to help your own agency and your own government be effective."

The USCG practice of permanent liaisons to the maritime agencies of neighboring countries was highly effective in this response. The liaison relationship created an experienced local responder able to communicate with USCG and HGO personnel. The HCG thought this relationship was so important that participants feared its absence: "If something were to happen right now, we know [the liaison officer] would be in contact directly and we would have other people like him, but, let's say what if something happened to this specific person?"

Impact

At the time of my visit, the HGOs who had been publics of the Coast Guard were operating at a reasonable level of self-sufficiency. Most of their day-to-day

operation was conducted in tents because there was no funding for new buildings. HGO officials recounted the response in very positive language, though the presence of a USCG official may have biased their feedback. I observed a positive working relationship between the HGOs and the current USCG liaison, which supported their reports of a successful response. Several of the USCG responders I spoke with highlighted the efforts that had been made to include HGOs in the response and restoration meetings, though when I solicited constructively critical guidance to future responders, one official in the HCG offered:

> I would ask them to work hand-in-hand with us, not to work in our place. Come along, alongside. And, and I would suggest that there be a clear chain of command so that information can flow the way it should, and in order to not step on someone's toes. [*this didn't occur]* intentionally, but it happens.

Local USCG responders corroborated this report, suggesting that inexperienced response personnel arriving after the earthquake acted too boldly, often ignoring the existing organizational structures. In general, though, all participants agreed that the relationships were a success.

A possible contributor to the successful aspects of the USCG/HGO relationship might lie in the words of one of the HGO directors, "It's easier for us to work together *[because of our mutual involvement in]* the maritime field." The directors of the HGOs had spent time in the US, attended conferences at US facilities, with US agencies. The senior officials in the HCG had received training from the USCG, attending Officer Candidate School at the USCG Academy or the

Chief Petty Officer's Academy, and regularly worked with USCG forces. The history of the working relationship contrasted sharply with negative reports on the relationship between the Haitian Coast Guard and the UN waterborne forces. As one USCG responder informed me, after the earthquake, "the UN was not patrolling, their boats were on land, sitting on trailers."

I also noticed a general amiability towards US military forces in Haiti. One USG communicator explained, "The [*US]* forces that came in here, they didn't have a track record of anything negative or positive, frankly, but people sort of took them seriously." Many participants contrasted public perception of the US forces against those of the UN, who had been in the country since 2004 and had occasionally held an adversarial relationship with the Haitian public. A Haitian NGO worker offered a complementary explanation: that the US presence in Haiti did not last long enough to affect public opinion.

USG Agencies

USCG responders and communicators indicated a variety of USCG agencies as publics: FEMA, OFDA, USAID, the DOS, the JTF, DOD assets, and the JIC. USCG responders with local experience commented on the size disparity of the relationship with SOUTHCOM, saying that the USCG was, "more like a remora feeding off a shark."

Internal USCG Publics

USCG participants expressed little internal dissent with how their organization responded to the earthquake, which suggests a unified public. Experience working in Haiti appeared to be a significant division: responders

who had worked in Haiti for a year or more generally presented themselves as *cultural translators*, helping the glut of incoming USCG and USG personnel to adapt to the working environment of a foreign country. USCG responders describing internal publics generally used geographical separation as their segmentation, identifying individual USCG ships, responders in Haiti, communicators and responders in Florida, and USCG leadership in Washington DC as important groups.

Communication between USCG assets was difficult in the aftermath of the earthquake, according to responders and communicators both on the ground in Haiti and in Florida. Cell phone networks were incapacitated, internet access was extremely limited, and many of the radio towers around the city had collapsed, but asynchronous methods proved more successful. Communicators in Florida had to find alternate methods to contact USCG members in Haiti to ensure they had survived, receive damage assessments, and pass operational information. One Florida communicator described how they used social media to re-establish contact and text messages to pass important information:

> The first way I was able to communicate with the [USCG forces in Haiti] was through text messages and Facebook....text messages don't use as much broadband as phone calls do, so you can get a lot more text messages through than you can phone calls. And the circuitry in Haiti that was operational crashed pretty quickly just because of all the traffic...we tried several methods... Email was delayed in responding, in part because the people we were trying to reach were responding or either directly impacted themselves.

The USG was quickly able to set up a temporary workaround, in the words of one USCG responder in Haiti:

> A lot of the stuff…was not done on a computer, but done over radio with various entities…we had I think 20 or 20-something bases set up with the radios going off of a repeater that FEMA had set up on a mountain top. So we were able to communicate throughout the city. A lot of this stuff was done by satellite phone, coordination while I was out on the road.

Much of the early data collection used first-person accounts for needs assessment from, "the teams, the crews that flew down there, some of the evacuees and the people that came with the evacuees."

Haitian Population

Though the Haitian population was not identified as a direct public of the USCG response, the HGOs that the USCG targeted were subjected to the same influences, so I have chosen to include some findings from my research. Having witnessed the response through American mediated sources, I was somewhat surprised to learn from an NGO worker with several years of experience in Haiti that:

> The [early] response was entirely Haitian led… except for a few search and rescue teams, everyone that was pulled out of the rubble was pulled out of the rubble by Haitians… By neighbors, by family, by strangers… people were sharing their food with each other…Haitian nurses and doctors were responding and working 24-7 to respond to people's medical needs.

The resilience of the Haitian people was recognized by responders, even in the form of gallows humor as one UN official joked:

You're either a resilient Haitian or you're a dead Haitian, simply put. Because no one else in Haiti's going to look after you, you have to look after yourself. They don't like their government, they don't trust their government, they run – that's why every community's quite strong – because they run themselves.

One USCG responder with several years of experience in Haiti added to that statement, suggesting that Haitians would like the US to annex Haiti. Other responders disagreed, though there was general agreement on an underlying principle: that Haitians did not trust their own government. One military responder added nuance to the idea: "[Haitians] want that protection of the US, they want to know that. As much as they want autonomy and self rule, there's a lot of nationalistic pride but there's not a lot of nationalistic trust."

Regardless of which interpretation reflects reality, I found a consensus from responders that the US government was trusted and appreciated for openly offering information on the response because of the Haitian government's history of reticence. Additionally, as an NGO responder with several years of experience in Haiti noted: "People's perception right after the earthquake was that they had no government, like the government no longer existed…Because there was just no word from the government, and everybody knew that most of the ministries had collapsed."

The same traumatic experience that created a mental gulf between victims and responders fostered a spirit of solidarity in the aftermath. As one responder who had spent several years in Haiti reported:

> Our experience the night of the earthquake, as traumatic and horrible as it was, was also, I mean it was incredible to us to see just how the, all of the layers of racism and classism and elitism that are so embedded in the country just fell away and, and that people with, y'know, Mercedes Benzes were piling up the back of their cars with wounded, bloody, bleeding people and taking them to the hospital yards.

This description, similar to the concept of a *cosmology episode* as described by complexity theory, lasted anywhere between a few days and a few weeks and, in the words of the responder:

> Changed the way that people related to each other, to be common, kind of survivors of the same massive disaster. I don't know if that makes sense... [*an]* instant bond with everyone that you come across and the, caring and sharing and kind of acknowledgement of others' humanity, and that that's what matters more than where you live or what your job is or what color your skin is.

RQ3: How did cultural and historical factors influence communications between the USCG and its publics?

Awareness of Haitian Culture

I asked participants to self-assess their overall awareness of Haitian people, history, and culture. My reasoning behind the broad question was to give an opportunity for them to define their own areas of expertise and ignorance. Of 22 total participants, six reported low awareness, two reported medium awareness, and 14 reported high awareness. Nine of the 22 participants were in the USCG, and a majority of the USCG officials reported high awareness. Though I could not correlate their self-assessment to a specific level of knowledge, I found it a useful point of comparison for their personal narratives.

My time in Haiti troubled my understanding of awareness - I witnessed hundreds of US and international workers conducting their day to day business removed from the majority of the Haitian population. They drove from protected, isolated office space to protected, isolated office space, ferried around in armored, air conditioned sport utility vehicles. I imagine that these workers will eventually leave Haiti and consider themselves experienced. I lack the perspective to judge whether fears of violence and instability justified these segregating security decisions, but I am confident suggesting that the isolation slows the development of intercultural awareness.

An Assembled Description of Perceived Haiti

All of my participants described Haiti during the interviews, or the characteristics of Haiti that they perceived. In an attempt to derive some meaning from their broad responses, I have assembled the various perspectives of the USG

and USCG responders into an overall summary of Haiti as they see it. The following quotes are drawn from my interviews and represent a compiled description of Haitian culture from the perspective of the American forces that responded to the earthquake. Because it is assembled, I should emphasize that it does not represent the perspective of any single responder. Additionally, this assembled description excludes most mentions of violence and instability because enough participants commented on that to prompt a separate section.

Haitians are "a relatively fragmented community and they don't much get along." The divisions of power are severe, "You're either a serf or you're a lord," and the lords are the "mercantile class...in many cases, not Haitian." This division is observed primarily in Port au Prince. Outside of the urban areas, "it's still feudalism with cellphones and fuel burning vehicles." The countryside is typically considered equivalent to the slums of the Capital.

"It's really an impoverished nation, exploited time and time over, and they've exploited their own resources to the point where they don't really have any natural resources to speak of." Haiti has suffered from foreign exploitation, but also self-governance has repeatedly failed:

> They have had two stable governments, the Duvaliers and the United States Marine Corps. That's it. That's it. Duvaliers ruled for 29 years and the USMC ruled for 16. So that's the stable government in Haiti. They've had 63 heads of state. 63. And that doesn't include the military juntas. OK, we've had what? We're on 44. They've had 63.

Weak government control has weakened the education system, which is primarily for profit, serving more affluent members of Haitian society. Low literacy rates and high unemployment contributes to the pervasive influence of the rumor mill.

The rumor mill, also called the "bush radio" or "radio 32," is a primary means of spreading both information and disinformation through the country. "The underground in Haiti is better than any given country." But this causes optimistic rumors to spread rapidly: "If you start a viable enough rumor that people want to believe, guess what? It's fact. It's not fact, but they don't care. They see it is fact, so that's what they get." After the quake, Haitians were, "expecting Frigidaires to fall from the sky," and believed that the outpouring of international aid would both repair the earthquake damage and improve their lives from pre-earthquake conditions.

Responders to Haiti must contend with a lack of "capacity…to even absorb, or manage the level of assistance to be given." Haiti maintains a limited technical capacity to harness assistance due to an infrastructure considered under-developed by American standards. Additionally, Haiti displays a lack of "moral capacity, talking about corruption" Corruption, infrastructural weakness, and a culture increasingly dependent on international aid mean that "seeing the need is one thing, but providing what can cure the need through channels that they need to make sure are proper, it's something else." Haiti will frustrate an unprepared aid worker or responder, "Probably 8,000 people have failed in whatever it is that you're attempting to do now, so be very careful about what you pick to be, what you want to hang your hat on and feel good about."

Haitians have developed aid dependence because of constant foreign aid: "Here's a thing: if you hand out free stuff, people show up there...IDP camps really formed around where we were handing out free stuff." During the response, Haitians were: "Content to watch," quick to accept assistance, and slow to show gratitude for fear of ending an aid transaction. Recipients of assistance would generally wait until after the fact to express any frustration with the procedures or perceived slights.

Though these comments are not presented to describe the reality of Haiti to an unbiased observer, they are indicative of the perceived reality of the responders, and may have impacted their efforts to communicate. While only participants claiming at least some familiarity with Haiti chose to comment on its cultural status, almost every participant had opinions on violence, safety, and security.

Perceptions of Violence

Violence exists in Haiti, but is Haiti a violent place? I am uncertain if that is a quantifiable statement; medical records, when they exist at all, rarely list a cause of death (Friesen, J. Personal Communication). An objective, supportable answer to that question is less important to my study than the perspective of the responders. Fear of violence can mean the difference between a compassionate, interpersonal relief response and the dehumanizing experience of food dropped out of a helicopter to Haitians scrambling in the dust storm below. Fear of violence and a perception of insecurity can thus drastically influence communication practices. Participants described their perceptions of violence

and also how they observed these perceptions affecting communication during the response. I conclude this section with my own limited perspective, developed during my month in the country, spent living both in the city and in a more rural area.

Why Responders Expected Haiti to be Violent

The majority of participants agreed that violence was present but not prevalent after the earthquake, though flaring tempers sometimes lead to tense situations. I witnessed this too: everyday arguments between friends, filtered through a language barrier and cultural differences in tone and body language, appeared to me as precursors to a physical fight. Most of the responders with experience working in Haiti hinted at systemic origins of violence, citing the lack of trust in government as the reason "why lynching's such a big feature in this country;" or, to the circumstances, "anybody who's been down-range to a place like that knows that three days after an event, that's when people start rioting because the response just can not be quick enough." Several US responders cited previous periods of violence in Haiti, including food riots in 2008 and political violence throughout the past decade. A Haitian responder I spoke with suggested, "violence is inescapable in the presence of poverty and instability, but the violence in Haiti is not as bad as the violence in surrounding countries of similar socioeconomic status."

Responders arriving in Haiti for the first time encountered overwhelming images with the potential to instill fear of violence. Being exposed to the morbidity and mortality associated with a disaster may have primed them to be afraid, "It has an effect on people mentally, they're not ready to see what could've

easily looked like post-battle. Arms missing and all that kind of stuff. Dead bodies, piles, people in miserable states, no food no water." Later responders, or communicators working from the US were exposed to mediated news accounts of conditions on the ground, which many participants disagreed with. In the words of an NGO worker with several years of experience:

> CNN coverage of Haiti...made me sick to my stomach...I just thought it's so not like that, what's happening [was] sensationalism and meanwhile people...are grieving, and they're praying, and they're putting sheets up over pieces of wood to try to make little shelters for their families, and they're dealing with the disaster in the best way they can. And it felt like it was really de-humanizing the way that most of the coverage that I saw there played out.

A senior JIC communicator concurred that news media, "were not helpful because they weren't truly telling a balanced story."

Violence and the threat of violence towards foreign responders was not absent from the country. One USCG responder cautioned, "if it's your first time there and you've never been in the country, you'd better be careful because they will take advantage of you...Most, all the crime that takes place is because they're hungry." The security precautions implemented by the US Embassy were comprehensive even before the earthquake, but afterwards they were intensified in anticipation of the large numbers of inexperienced personnel arriving in the country, which experienced responders credited as instilling fear, whether necessary or not, in the minds of the arriving USCG and USG personnel.

How Perceptions of Violence Affected the Communicative Response

I can understand why USCG and USG security planners were concerned during the response. As one USCG responder observed, "if something happened, if someone did get shot or hurt...the whole [response] would've been in question." Every response effort presents hazards, and every response planner is tasked with mitigating those hazards while effecting a safe and beneficial response. I asked my participants to elaborate on how institutional and personal perceptions of violent risk affected the response. Their replies were generally negative, suggesting that the response effort was limited by draconian security regulations that were occasionally justified. Face-to-face communication was frequently cited as a vital component of the communicative response, so any restrictions causing USCG personnel to fear for their safety would likely have impacted their ability to interact with the people they were being "protected" from.

A senior USCG communicator felt that personnel who feared violence were a hindrance to the JIC communication effort, citing a specific interaction with two communicators working in Haiti for the first time:

> These two that I'm talking about, these junior PAs, always complaining about "oh, I feel unsafe"... They didn't want to leave the embassy. And then one time they sent messages saying they felt unsafe at the embassy, so I'm like, 'listen, if you feel unsafe at the embassy, you shouldn't be in Haiti.'

Actions are often said to speak louder than words. A local NGO responder working from the UN LogBase in the days after the response gave a powerful example of how security concerns may have presented an image counter to the humanitarian framing of the response. He reported that Urban Search and

Rescue teams were prohibited from going into the city without a security escort. Because there were not enough escorts:

> there were search and rescue teams sitting around...it was infuriating to me knowing that the people like my neighbors were exhausted, had no resources, were unable to dig, to keep trying to dig people out of the rubble, and again this is two days later, a lot of people still alive.

The perception of many inexperienced response personnel was summarized by the reaction of UN personnel to the thought of leaving the LogBase:

> They were shocked and horrified that we were out, when we showed up, or were going to leave, they were like, "you're not staying here? You're going out there?" as if we were like going to get hacked up into little pieces if we left the logistics base and we were, 'we live, I mean, our house is out there' (*laughing*), y'know?

Fear of violence may have also limited the USCG capability to collect information in the aftermath of the response. Less-restricted NGOs reported higher levels of situational awareness in the aftermath, though that might have also been the consequence of increased local knowledge:

> We didn't have any security restrictions and spoke Creole and had motorcycles and knew our way around the city, [which] gave us the opportunity to help, or... act, react in a way that other people were not able to do because [*of*] the blanket security restrictions.

Locals I spoke with, both associated with the USG and independent, offered a unique perspective on perceptions of respect, and how fear of violence can harm the overall communication process. Their concerns were echoed by a USCG responder with several years of experience working in Haiti, who proposed that the strict security methods may have ultimately been counterproductive:

> Makin' that country out like it's so dangerous to go from point a to point b when it's totally wrong. They did that to us, too. 'You gotta have an armed escort,' 'you gotta be kidding me.' All you're doing is inviting crime by doing that, people are insulted when you have that kind of a situation, when you have to lead a group by armed gunmen. They're very much insulted.

His comment resonated with me, especially because of the USCG's overall goal of working itself out of a job. If one of the communicative objectives of the response was to restore the local organizations to control, taking actions that the target publics might find offensive would seem counterintuitive. In addition to the fear of violence, responder considerations of target publics may have helped or hindered the response.

Considerations of Culture in Communication

The USCG, despite having a permanent presence of only two to three personnel in Haiti, became an essential part of the USG response from both operational and informational perspectives. USCG responders acted as *cultural translators,* using their local knowledge of systems, personnel, and practices in Haiti to inform inbound inexperienced USCG personnel and also other USG response agencies. *Cultural translators* helped effect the communicative

response. They frequently intervened to alter the tone and course of US communication, fine-tuning it to avoid isolating specific publics or derailing necessary inter-organizational relationships and keeping the US response "on message."

Tapping Cultural Experience

Intercultural considerations in crisis management are necessary even within our country, or as a USCG responder put it, "going down to the bayous of Louisiana and understanding the culture of how the Parish works or doesn't work is still even a challenge for the US government, federal, and even state." A senior communicator at the JIC described how his team used Foreign Service Nationals (FSNs), Haitian citizens employed by the US Embassy, to offer cultural and language translation, asking:

> If we're going to do these information operations campaigns, how do we do
> it? What do we say that makes sense? Because you can't just go in there
> and act like you're doing a commercial in America, you had to, you had to
> write it and word it in a way that it was a) respectful, b) understandable,
> and actionable by people of a different culture, so they also helped with
> that.

The JIC also utilized the FSNs to shape the press conferences with Haitian news media, determining:

> Who to bring in because they already had relationships with these
> people...they did a really good job of making sure we had a cross section
> of...pro-government, anti-government. You didn't want just one group,

you wanted to have a cross section to get information out in a balanced

way.

JIC communications with the Haitian news media may have been bolstered by

the Haitian government's historical lack of communication. As a USAID

responder explained to me:

The Haitian government in general is averse to communicating with

constituents. Governmental communication is not in the culture, though

the earthquake may have changed that. Additionally, since official

communications were unusual prior to the earthquake, the Haitian

population may have appreciated any efforts made by international

responders to communicate with them.

 The USCG reached back into its ranks to identify and harness

experienced personnel for the response. The ratio of experienced to

inexperienced responders was low, so the USCG planners typically assigned more

familiar responders to leadership positions where they would have more

communicative responsibilities and recommended similar actions to other

agencies. This was necessary because time constraints prevented the majority of

responders from receiving cultural sensitivity training typically provided to

routinely deployed US and UN forces.

I had the opportunity to review some of the UN cultural training materials

at the conclusion of my month in Haiti, though I did not have the opportunity to

sit in on the live training. A senior UN responder described the content to me:

"There's a Haitian staff member who comes and gives a pretty good presentation,

I must say, about Haiti, where they came from, the great revolution, things you

do and don't do around Haitians, body language." Second-hand education of cultural practices is not a reliable enculturation aid. A USCG responder with several years of experience in Haiti related in a story about a high-ranking US military officer sharing his experience after the response as an example of how misperceptions can enter the communication process, and a demonstration of the limitations of any non-experiential training:

> He started telling about what it's like in Haiti and…he was getting kinda choked up near the end of his presentation, and he was saying things like, "y'know, you're out there, and it's just heartwarming to see these Haitians, they're so grateful to us, and we'd be driving by and they'd make these motions, like this (*brings back of hand towards his mouth*) like they wanted to kiss our hands they were so grateful." This means "give me something to drink," or if it's a girl and she does this, that means… prostitute… And then…he said, "and it really was touching because they were following us around doing this (*touches fingertips of two hands together above his head)* and we finally found out that it was, they saw [his organization] as guardian angels…" That means they want a tent, that does not mean they see you as a guardian angel.

A USCG responder identified cultural familiarity as critical to responder mental health, citing a case where a responder was unable to resolve her perceptions of what a response effort should be with the reality of how it was developing:

> [Responders] want to be successful. But they may not think about how they're going to apply their expertise and knowledge to the problem

without any consideration to culture, language, and the realities of doing it

in that environment....I've seen people get so frustrated they just break

down, it's done, get 'em on a flight. It happened in our group, someone on

the FEMA team just couldn't handle the realities on the ground, we had to

send her home.

Another USCG responder's advice to new arrivals captured the importance of

cultural familiarity for decreasing the stress of of the new environment on

responders: "The fact that you see a guy walking down the street with a machete

in his hand, don't let it bother you. He's a worker, he's not out there to cut your

head off."

Controlling the Image of the Response

With hundreds of thousands dead and countless more dying or critically

injured, the USCG and its partners had extremely little time to not only provide

direct assistance, but also facilitate improvements to the maritime infrastructure

to allow an international stream of aid to enter Haiti. Throughout all of this, the

responding forces had, in the words of one responder:

To value the sovereignty of Haiti and reinforce that in every way possible,

was critical and you have a very heavy handed DOD capability that arrives

with so much capability and resources... being very cautious about how

you communicate who's making the decision in a foreign government is

not something that the DOD trains for per se, and I mean like that's State

Dept role, that's a political role and, but yet we were on the ground putting

the functional pieces of the Haitian government back online and I think we

had to be very very cautious and there wasn't a lot of guidance.

The USCG helped address this concern in the first hours after the earthquake and continued to promote the desired appearance throughout the response, as the same responder pointed out, "We're viewed as humanitarians first and supporting DOD second, so I think there's an advantage for us on the diplomacy side of that and just for responding effectively, and that the DOD cannot do."

Coast Guard responders were able to dissuade partner agencies from certain courses of action that could have caused a shift in international and Haitian perception of the response, for example:

> We had cargo containers floating out, and this would be an example of a crazy idea: a CO of a vessel suggested that they sink the cargo containers by gunfire out in the bay...when I got wind of this I immediately got on the horn with my superiors and said "for the love of god, please do not allow this to happen. The Haitians are going to think we're out there shooting Haitians trying to flee the country, or we're going to have a wild shot and somebody's going to get hurt... To their credit they were like "what? who said this? no, that's crazy."

The USCG used its experience as a humanitarian agency in the role of *cultural translators*, helping responders from a military culture operate in terms and actions appropriate to a humanitarian culture, which was critical for controlling the image of the response. One USCG responder shared the following story:

> I was on the pier in Haiti at like six in the morning and I was talking to some Coast Guard guys and this...Marine General...was just so aggravated because the French Marines from Martinique, so the French Navy, the

French Marines from Martinique were in Haiti tying up at the pier… the

Marines see a beach and take a beach. So what he asked me to do was, he

said "OK, you're a [PAO]? I want you to get CNN here live and I'm going to

have three [Marine landing craft] come up in an hour and…drop their

ramp and we're going to have Marines come storming ashore…and this is

going to show the US government's here. You understand that?" and I said

"yes." and he's like, "well, what's the problem?" and I said, "it's completely

off message. it's not what we want to do' and he was like 'you don't

understand what we're doing here. We need to do this." and I'm saying

"you don't understand, general, that's not what we're going after. That's

the wrong message. The message might work in Dubai, the Middle East.

[Haiti is] a sovereign nation."

Most USCG and civilian responders had similar stories to relate, generally

involving an over-enthusiastic US responder seeking to present an image outside

of the agreed upon humanitarian response framework.

Cultural Fear of Mass Migration

According to the USCG communicators that I spoke with, "we didn't sit

down and think about the whole history of Haiti…but we did think about the

mass migration history of Haiti." Communicators in Florida were reluctant to talk

about the HSTF-SE and preparations to intercept a mass migration to avoid

disrupting the image of the response. As one communicator shared, they:

Knew that because of the humanitarian aid that we were rendering, the

assistance that we were providing, [we] would be sending mixed

messages…talking about, 'we're going to repatriate you and we're going to

do, we're going to interdict you at sea, and you're migrants' and that kind

of thing, so [we] did not do that aspect of it.

Though participants noted the disparity between the historical triggers of mass

migration and what they witnessed in the aftermath of the earthquake, they

feared a mass migration because the unprecedented severity of the earthquake.

However, USCG responders in Haiti for the earthquake conducted research on

the ground and quickly determined that a mass migration out of the country was

unlikely, though more than a million Haitians were reported leaving Port au

Prince for the countryside.

Floridians perceived a higher threat of mass migration than the USCG

responders in Haiti. As a Florida-based USCG communicator explained to me,

"South Florida has that unique experience of having gone through Mariel, having

gone through the '94 exodus, where you had both Cuban and Haitian migrants

coming in droves. So they're a little more attuned to that specific issue and

they're a little more gun-shy about it." Many of the communicators working at the

JIC had no experience working in Florida, so they did not consider the

ramifications of releasing an image of an overloaded Haitian ferry without

providing context. The Florida-based communicator offered perspective:

When that image came across the wire...the cut-line didn't provide a full

context of what that was, the media looked at it and interpreted it and

reacted to it, and it was game-on at that point...So when I started seeing

that trend in the line of inquiries from the media, I could recognize right

away how this thing would get legs in South Florida and you've got a, you

know, you've got a CNN bureau there, you've got [Associated Press], you've

got a FOX bureau there, so if you don't deal with it, it's gonna get national legs and that's really what we didn't want to do so it had to be dealt with pretty quickly.

Demonstrating the concept of a *cultural translator*, this communicator and his department immediately addressed the JIC and the DHS to make them understand how the messages would be received and interpreted in South Florida and begin publicizing the preparations of the HSTF-SE to prevent an adverse public reaction with potential national consequences. His efforts were successful as he explained: "When it hit, it was a real sharp spike, it went on for about a week and then it dropped right out. We were really effective. Got the message out, then everybody got off it and got back on talking about the humanitarian effort." Temporary Protected Status (TPS), a federal protection granted when foreign nationals in the US are unable to return to their country safely (US Citizen and Immigration Service, 2011) had been granted when the photograph was released, which he was identified as a critical point of interaction in the public's eye:

There were a few inquiries that were generated by the granting of TPS for Haitians that were in country by [the] Secretary of State. It didn't really change. And that created a certain amount of stir within the community as well. It's kinda like a one-two punch. First we do the TPS thing and then this photo shows up.

Surprisingly, responders reported that the granting of TPS had minimal consequences on the ground in Haiti, perhaps because the infrastructure was so devastated and food insecurity was so prevalent that no one could dream of stockpiling enough food to make a six-day boat journey north, or because of the

influence of the Haitian diaspora in the US, whom the USCG had already begun communicating with.

Interpersonal Cultural Considerations

The majority of the intercultural considerations that participants discussed in our conversations dealt with interpersonal communication. Haiti is reported by natives and visitors as a face-to-face country, so this was not surprising. Interpersonal interaction was critical to the response, especially for long-term restoration. Satisfying the immediate needs in the aftermath of a disaster is only half of a responders job; the other half is restoring the pre-existing organizations to a functional state. USCG responders had to balance the task of opening the port with the necessity for the HGOs to play an integral role, and in order for the HGOs to participate, they needed to be treated with compassion and respect for their circumstances and their cultural practices. I found the concept *cultural translators* frequently. HGO members I spoke with verified both the roles and importance of these individuals.

An experienced USCG responder explained an important consideration that time-strapped American responders might not otherwise have made:

> You just can't pass people in the Haitian, in the US Embassy that are Haitian and not say something to them. I mean, that's so rude, right? We do it all the time, you walk the streets of DC and pass everybody on the street and you may not greet them, not a single person. But in Haiti that seems so foul, so wrong. Particularly if you want to interact with them, the greeting is important.

Many of the responders who had previously worked in Haiti before identified the importance of interpersonal relationships in the response. One reported making it a focus of his efforts:

I was going all different places doing the best I could and establishing friendships amongst the Haitians and the CG people who couldn't speak the language. And what we ended up doing was, some of the Haitians who wanted to learn [English], I hooked them up with some, or some of the Americans that wanted to learn Creole, I hooked them up with some of the Haitians who knew a bit of English that worked in the same area, so at night they'd be sitting together and they'd be learning both languages.

Some responders and HGO officials criticized the response for not aligning with the needs of target publics. I asked a senior member of one of the HGOs what she would suggest to incoming responders in the future, and she agreed with the following paraphrase:

Don't assume that [the Haitians] don't know anything, because they know their country, we don't, we have to listen to what they have to say. We don't just come in and do everything our way. To me, that's the the big thing...It doesn't matter... who comes out, they're not going to know." and she added, "And that's something simple...you have to learn, you have to have an idea who is that person you are going to deal with it. You want to ask me something you should learn the land, the field.

Clashes of Responder Culture

The most controversial issues addressed by participants were the levels of assertiveness used by responders in their interactions with the HGOs. One USCG

responder summarized both the benefits, "we're the take charge kind of people that they don't have to be at that point," and the situations in where the approach was harmful:

> We had a lot of people here who were very overbearing. I'm not saying USCG, lot of people in uniform though, came in here very overbearing like we owned the country. But this is their sovereign nation... unless the people you're dealing with are so obstinate that they're not allowing you to do the right thing, and the Haitian government officials were not... we didn't need to act as arrogantly and overbearing as we did in some cases.

This person identified himself as a *cultural translator*, assisting responders operating in a military mindset who were used to rigid, hierarchical structures of authority to succeed in a decentralized, less formal, less confrontational environment:

> I was a very big player in that role, and more of a peacekeeper between, for example we had a big ship show up down at the [Haitian Coast Guard] base and there was a, there was a high ranking person that came ashore from that ship. And that person was being extremely overbearing about what was going to get done on the base...I saw it happening and I pulled this person aside who outranked me and I said, 'listen, you, I understand what you're trying to do but you're making these people angry...you can't talk to them like that. This is their base. They can tell you to get out if they want. They won't do that, but they could..'. And that person said they understood, but I think their personal way of dealing with people was

always that way so I'd always constantly see it reverting back. So I was

constantly having to do that.

This intervention was essential because, as a senior leader of an HGO explained

to me, "We can say that Haitian mentality is so complex... Haitian people like to

make people feel welcome," by which she meant that Haitians would be non-

confrontational when interacting with strangers, but also acknowledged that

displaced Haitian officials might be resentful and unwilling to work with

responders after being slighted.

Assertiveness is a necessary part of military organization, and is especially

so in a high-uncertainty environment. In the words of one responder,

autonomously identifying and addressing needs is, "how we operate, and we have

our policies and our directives and we can't deviate that much until a certain

amount of time goes by and we really get a feel of where we are and what the

people are like." To go in without structure would have been counterproductive.

Consequences of Cultural Considerations: Restoration

Cultural translators may have served to prevent the forceful and assertive

US responders from communicating in a way that undermined the pre-existing

organizational structures, which empowered HGO leaders to eventually resume

control of their organizations. The HGO representatives identified specific

instances of arrogant responders communicating poorly. One member of the

HCG said: "[The responders] just wanted to help, [but]...they asked you to do it

the way they want them to be done, and most of the time, most of the time they

were wrong." The HGOs did not appreciate pompousness, but in this case it

appears that it was prevented from derailing the response effort.

Both the HGO representatives and the USCG responders believed that the majority of their communication with the USCG were facilitated by an existing relationship between the HGOs and a USCG liaison. The pre-existing relationship was also credited with decreasing the negative impact of the rumor mill on the USCG/HGO interaction – the trust already developed lent more credence to what the USCG said, and the experiences of past coordination fostered higher HGO awareness of what the USCG was and was not capable of. No participant expressed frustration with the amount of time needed to transfer control back to the HGOs.

Did Cultural Considerations Influence How USCG Forces Were Received?

The USCG was well received by Haitians and HGOs. Participants did not identify any instances of hostility directed at USCG forces. The HGOs and Haitian nationals I spoke with reported positive memories of the USCG presence, when they were able to identify it at all. One responder reported that the USCG was received positively:

> But not any more so than anybody else. They see us ashore, they assume we're US Marines, believe it or not… They think we're MINUSTAH, MINUSTAH being the UN. They think big white boat, that's the UN. Everything white is the UN. Wear blue uniform, this is a bunch of UN people here.

I found the previous statement unusual because many responders identified a distinct difference in public perception of US and UN forces, suggesting that the positive reception of the US forces was a direct result of public discontent with the UN presence, though several responders added to this argued that the US was

well received for presenting a consistent image of a humanitarian response and avoiding the use of violence. Two participants suggested that cultural awareness had little impact on the reception of the response. Others felt that the political climate of the country affected communication more than any specific cultural considerations. A responder with USAID who had assisted following devastating floods in the northern city of Gonaïves in 2004 suggested:

> If the international community would've tried to do the earthquake response in the political environment of that time we would've accomplished nothing, because back then...if we funded an NGO to work in this neighborhood, they would not be permitted to work in that neighborhood because this was a pro-Aristede neighborhood and that was an anti-Aristede neighborhood, so if you're working there you ain't coming in here.

Did Cultural Considerations Impact USCG Communication Efforts?

Releasing a photo of an overloaded ferry to a region of the US familiar with the history of mass migration was, in the opinion of all the communicators who were aware of it, unwise. I was unable to interview anyone involved in the decision to release the photograph, in part because they were not in the USCG and in part because releases were generally attributed to the JIC instead of to an individual communicator. The rapid assessment of the situation by a skilled USCG communicator and the willingness of his command to allow publication of the USCG's mass migration plans prevented public outrage.

The HGO officials offered a single criticism of the USCG response related to communication. The USCG set up a medical triage clinic at the Killick Coast

Guard Base providing medical assistance and medical evacuations in the early

days after the quake, but as one HCG responder reported:

> parents might be looking for [a person who received care] for days and
> they cannot track them down...some of them were taken to someplace, I
> don't know where...So, when [*the families]* ask us because we are Haitians,
> they expected us to give an answer, 'I have my son, I have my daughter, we
> came here this morning' or 'he was dropped off here, but I come, I don't
> see him, I don't know where he is,' I know that people were brought to
> some other places to be taken care, but in fact we don't have any record...
> sometimes the USCG personnel would put the person on the helicopter
> and take them somewhere, and they assumed that any Haitian they talked
> to was going to pass the word.

While the media depiction of Haitians was not a stated concern of USCG

communicators, the sensationalism drew focus away from the response effort. US

and Haitian NGO workers I spoke with in Haiti resented the negative portrayals

of Haitians in the US media. Additionally, depictions of violence resulted in, as

one senior responder described, "many of us who were sort of colored by or

programmed to expect Haiti to be an unstable and conflicted place, so that our

sense getting off the plane post-earthquake was that we were in a place that was

going to be unstable along political lines."

Though responders were fearful of further violence because of their previous

experiences in the country, most felt that US communication efforts emphasized

the humanitarian intent instead of a militaristic security intent, and most of the

Haitians I spoke with concurred.

<u>Chapter 5 Discussion and Conclusion</u>

This study used qualitative methods to reconstruct the USCG communicative response to the Haitian earthquake. My goal in assembling the response narrative was to trace the emergence of ordered systems out of post-quake chaos and how communication shaped that system. Interviews helped me understand the development of communicative actions, strategies, and networks.

One of the most important themes I uncovered in analyzing the results was the utility of *cultural translators*. I identified these as agents at the individual or organizational level that bridged knowledge gaps between the response forces and their publics. The USCG as an organization performed this role by connecting military and civilian response agencies. Individuals within the USCG performed the role in even more communicative functions both at the micro and macro levels.

USCG responders and communicators used their experience in Haiti and South Florida to manage the crisis and prevent further crises that could have resulted from inexperienced response forces acting without regard for the local environment. USCG personnel helped maintain an appropriate balance between relief and restoration when working with the HGOs and educated American responders on the intricacies of Haitian social interactions to preserve and foster the critical working relationships. In the US, USCG personnel worked to prevent public uproar over fear of mass migration from Haiti. Personnel in the US and Haiti helped the response present an image of humanitarian assistance instead of security driven invasion.

Cultural translators were not a panacea, nor were they cultural experts. Every one of the participants I spoke with who identified their role consistent with my definition of a *cultural translator* was a caucasian American male, generally a senior USCG official, with between two and four years of experience in Haiti. I found anecdotal evidence of Haitian-American USCG personnel participating in the response, specifically as translators. I did not have the opportunity to speak with these members. The *cultural translators* were not operating from a point of full cultural awareness, but rather were more aware than the remainder of the USCG and many of the other USG personnel that responded.

Autonomy emerged as an important theme that enabled the USCG to *adapt* and stay *flexible* to emergent needs and situations throughout the response. *Autonomy,* the ability of an individual actor to identify needs, set goals, and choose strategies and tactics without direct approval from a central authority, expanded USCG capabilities without requiring a commensurate expansion in structured command presence. In the low organization environment of the early response, this enabled the USCG to act quickly and effectively and accomplish more than other response agencies.

A note on complexity: When I began planning this study and conducting my research, my focus was on the organizational level response, and I had chosen the USCG's actions as my unit of analysis. As I completed more interviews and added depth to the response narrative, I realized that the response could not be reduced to a single unit of analysis without a significant loss of meaning. The USCG communicative response was heavily influenced by the actions of

experienced individuals, just as the overall USG communicative response was inextricably linked to the early actions of USCG assets. In the discussion that follows, I attempted to hew as closely to my original unit of analysis as I felt would provide an adequate test of the theories, but I deviated as necessary – noting when doing so – to show where the complex interactions between individuals had a critical impact on a higher unit of analysis like the communicative response effort or the USCG.

In this section I discuss how my results confirm or challenge complexity theory and the STPS. In hopes that my work may some day be used to lessen the extreme suffering, of which I only witnessed the powerful echoes, I address practical implication of my findings. Before concluding, I tally the limitations of my study and also highlight directions for future research, which are plentiful.

Theoretical Implications

Complexity Theory

Complexity theory is generally incompatible with testing. Instead, I discuss whether the USCG communicative response fit the parameters of a complex system, identify the conceptual themes of complexity theory present in the response, and compare the USCG's communicative actions against the normative advice offered by complexity scholars to assess how the USCG performance adapted to the complexities of international crisis management. To conclude, I compare the successes identified by participants to those identified by the scholars.

The USCG Communicative Response as a Complex System

The USCG response presented by participants fit all the criteria of a complex system as described by Gilpin and Murphy (2008). On both the organizational and interpersonal level, the USCG response systems were composed of independent actors whose actions altered the face of the response over its course, transforming it from a disorganized flood of personnel and interactions into a relatively streamlined joint response and communication structure and restoration effort. These self-organizing interactions occurred locally, in the PaP airport, in the Embassy, at the Killick HCG base, and on the streets of the city. They were rule based; often guided by organizational standards and influenced by the suggestions of *cultural translators*. They provided a critical degree of adaptability to the response process. Interactions occurred on a recurrent basis – the USCG was in Haiti every day, communicating with publics, assessing needs, and running meetings. Interactions were non-linear; many situations spiraled unpredictably out of immediate USCG control until new strategies were made to address them. Most participants concurred that the overall scope of the response was greater than any one person could grasp, but the response was not the only complex system present. HGOs, other USG agencies, and the Haitian population all exhibited the characteristics of a complex system, which I have compiled in Table 2. I have separated the USCG response from the USCG as an organization because the response required a higher degree of complexity absorption than day-to-day USCG operations.

Cosmology Episodes

Severe social stratification was evident during my visit, but those boundaries temporarily fell with the buildings throughout Port au Prince. I lived

on both sides of the divide: from camping on the beach and walking the decimated streets of Leogane to staying at a bed and breakfast behind guard dogs and an eight-foot concrete barrier in the hills ringing the capitol. Many participants described a homogenization following the earthquake; Haitians were forced to question their understanding of the world, and in the ensuing chaos acted outside of traditional boundaries to help fellow citizens. The reported duration of this effect varied, but another unreported example of cosmology episodes lasted longer and was more closely related to the response.

USCG personnel with experience working in Haiti were confronted with hundreds of responders lacking cultural familiarity. The experienced personnel, working as *cultural translators*, had to guide or even incite cosmology episodes for the inexperienced responders to increase their capacity for effective communication across a cultural barrier. Weick (1993) highlighted that recovering from a cosmology episode required an intense learning process, which was the stated goal of the *cultural translators*. This occurred on an organizational level as well: the USCG helped partner USG agencies in the JTF recognize that the partner agency's traditional communication methods were unsuitable in the context of Haitian crisis management.

Attractors: Stable, Unstable, and Strange

Complexity theory challenges the belief that control of a complex system is possible, but posits the existence of influential forces known as *attractors*. I found examples of *attractors,* organizing or destabilizing forces pulling the response to higher or lower states of organization. *Stable attractors:* the face-to-face communication of daily meetings of the JIC, JTF, and MTSRU, the

coordinated themes of JIC communications, the USG response mandate, and the USCG ethos and guiding principles of operation, influenced the USCG response towards a higher level of organization, forming an ideological structural framework that transferred into organizational communication structure or guided decisions before organizational communication structure was cemented.

Erratic and unpredictable *unstable attractors* threatened to do the reverse. Cultural ignorance, troubling stimuli of the post-disaster environment, and prejudices of violence affecting communication with publics could all have thrown the response into a more chaotic state. The preventative educational efforts of *cultural translators* and the policies of the response structure prevented most of these from happening. The photo of an overloaded Haitian ferry, released out of context, was a powerful example of the destabilizing effects of an *unstable attractor*: the entire HSTF-SE response framework had to shift course to prevent the disorganization of public panic.

Strange attractors, non-linear influences that eventually demonstrate their ability to prompt higher levels of organization, were also present, though by definition their existence is harder to demonstrate. I identified two *strange attractors* in my examination of the response. The first was the PaP airport. The airport was the initial entrepôt for all relief supplies, communications personnel, and news media, and functioned throughout the response as the point of departure for American citizens and critically injured victims requiring treatment in the US. The airport influenced initial organization; the JIC Forward was formed there and the much of the USCG response originated there. The communication patterns that connected the small city of response forces that

sprang up on the tarmacs and open spaces of the airport persisted throughout the response. The high-density interactive environment persisted even when the response forces had more room to spread out.

Interpersonal and organizational relationships emerged as the second *strange attractor.* Perhaps not so strange, given Haiti's reputation as a face-to-face interpersonal culture, these relationships informed and influenced the response. Several of the more experienced USCG responders actively tried to foster these relationships between HGOs and newly arrived USCG personnel. The majority of the reports that I identified as the work of *cultural translators* were prompted by pre-existing relationships informing an intervention to avert a counterproductive communication decision or action. I believe that the relationships existing prior to the earthquake and those formed during the response were instrumental shaping the communication that ultimately restored the HGOs and the maritime transit system. Relationships helped influence the response towards a unified state, with engaged HGOs, considerate USG agencies, and collaborative needs assessments and restoration. Stronger interpersonal relationships would have improved the ability of responders to conduct productive needs assessments, addressing one of the primary criticisms made by the HGOs.

Historical Context

The concept of a *historically situated system* inspired my third research question. I found its presence in the answers to all of my questions, but not in the way I expected. My preliminary research caused me to interpret a dire history between the United States and Haiti, one fraught with military interventions,

economic manipulation, exploitation, and political intrigue. I expected this history to manifest itself in animosity towards the US response and rebellion against a perceived neo-colonial invasion. I didn't find that. Instead, I found a historical perception of violence held by many of the foreign responders that may have hindered the response with unnecessary security restrictions. I also found that US forces were received favorably because Haitians disliked the UN and the US was seen as a better alternative. The USCG response benefited from the recent historical context of the Haitian system it was interacting with, but it was also successful by its own merits.

Evaluating Success in a Complex Environment

Complex systems do not revert to their old states, which makes dominant paradigms of crisis management assessment difficult (Gilpin & Murphy, 2008). Both USCG and HGO personnel considered the response a success. The specific items that they identified as successful were the coordination of the JIC, the restoration of HGOs, defusing concern in South Florida about the threat of mass migration, and the control of the humanitarian response frame. I compared the methods they reported as contributing to the success to the metrics presented by complexity scholars and found general agreement between the two lists *(*Ashmos, et al., 2000; Falkheimer & Heide, 2010; Gilpin & Murphy, 2008). The USCG response generally absorbed complexity, maintained permeable boundaries and predicted a range of system outcomes. Though fostering requisite variety in the traditional sense of mirroring the target public demographics was impossible, the USCG used *cultural translators* to help increase the diversity of responder and communicator viewpoints. Additionally, USCG responders and communicators

made efforts to enact their desired reality. One metric of a successful complex response that was not consistently present was the concept of double-loop learning. In this section I will briefly match each of the metrics to aspects of the USCG response and compare them to the metrics of success identified by responders.

Complexity Absorption

 Goal Complexity. As can be expected from an organization with the motto "always ready," USCG responders and communicators pursued a complex variety of communications goals, though the stated organizational goal of decreased involvement was a form of complexity reduction. The USCG was able to shift focus as time passed, challenges were met, and new problems emerged. Participants noted an organizational willingness to absorb *goal complexity*, communicating in collaboration with the JIC, with HGOs, and with US news media for different purposes. The capacity to absorb complexity earned the USCG the title of "federal first responder," a label that speaks less to medical capabilities and more to resourcefulness and willingness to take on new challenges. Goal complexity absorption contributed to creation of the JTF and the JIC, and emerged in discussion as themes of *flexibility* and *adaptability*. Many participants noted it as a measure of success.

 Strategic Complexity. The USCG employed a diverse array of strategies to communicate with their publics. Early in the response USCG communicators developed several strategies to gather information and imagery: manually transporting digital media cards onboard medevac flights, interviewing personnel returning from the scene, and using media inquiries to assess needs on the

ground. Non-traditional USCG strategies facilitated the restoration process: Responders drove to the homes of HGO professionals to make sure they were included in restoration planning meetings, and the PSU crafted a customized training program to increase HGO capacity. USCG participants took pride in their strategic complexity, often highlighting the ways that Haiti did not allow traditional response models to work as context for their achievements.

Interaction Complexity. USCG communicators and responders targeted multiple levels of the response structure: other agencies, news media from many countries, and Haitian partners. Their absorption of i*nteraction complexity* was manifested as a communications network instead of a hierarchy, but the USCG response participated in both complexity absorption and reduction. The JIC displayed characteristics of a hierarchy: centralized reporting and strategic formation. Autonomous USCG agents operating in Haiti created a communication network that influenced the course of the USCG and USG response. Responders and communicators expressed frustration with hierarchical elements of the response, but generally did not identify network-based communication as more successful.

Permeable Boundaries

The impermeable boundaries I observed while in Port au Prince were troubling. Even the minimal number of USCG personnel with experience in Haiti prior to the earthquake would have been insufficient to provide the entire response with an accurate view of local needs, so interaction with local publics and information exchange was critical in shaping the response. *Cultural translators* worked towards permeable boundaries by both encouraging

interaction and filling in the gaps when it hadn't yet occurred. *Autonomy* was also instrumental at maintaining *permeability*. Autonomous agents increased the "surface area" of the communicative response, allowing more points of contact between the communicators and local publics and speeding up diffusion or absorption of needs, concerns, and messages. The joint operational and information responses also attempted to maintain permeable boundaries. The JIC challenged basic media relations models in favor of a more holistic approach by including InfoOps, public relations, public affairs, and partnerships with NGOs. The permeable JTF boundaries were not planned, but participants identified the loose lines of communication as an important source of adaptability in the early stage of the response.

Predicting a Range of System States and Emulating Requisite Variety

These two concepts are closely related, though they were not equally present in the response. The USCG response attempted to foster *requisite variety* by tapping USCG responders with past experience in Haiti. USCG *cultural translators* sought HGO participation, but their stated purpose was restoring HGO control, not seeking HGO input on problems confronting the response. I believe that the theoretical metric correlates with a shortcoming of the response: the lack of Haitian voices in guiding the USCG actions may have been a weakness retarding the restoration process. The *requisite variety* that the USCG was able to emulate allowed responders and communicators to *predict a range of outcomes*. In Florida, communicators balanced their predictions throughout the response, identifying when to remain silent and when to broadcast their preparations for mass migration. The JIC was also successful at predicting

potential outcomes, carefully guiding the focus of communications to coincide with accomplishments of the response. The operational response demonstrated the necessity for many inputs – its interagency structure drew on the diverse organizational specialties to realize a whole of government response.

Enacted Reality

Military Public Affairs Officers preferred to disassociate from the label of public relations. They felt it was too closely linked to image, spin, and manipulation. Despite that, image concerns shaped the USCG response. Responders and communicators wanted to show that the US Government supported the Haitian Government in a humanitarian response, and their desire to present that image pushed the response towards that pattern. *Cultural translators* discouraged actions that were inappropriate to the humanitarian image. Similarly, the desire to present a joint communication effort manifested a joint communication effort; the communicative framework came together in part to broadcast its own existence. This appears circular, but I consider it *enactment* because the desire to present an image influenced the operational and informational structures to fit that image. The image that responders hold of their own actions can drastically influence how they respond.

Double-Loop Learning

Double-loop learning (DLL) that had occurred during previous responses helped the USG forces organize after the earthquake, and *DLL* related to this response helped the USCG keep focus and achieve objectives. Beyond just addressing the needs following the quake, USCG responders had to learn to work and communicate in a foreign system, though not all responders "got it"

afterwards. The JIC structure was a successful result of previous *DLL*, and was credited as a strong success by all of the participants involved in it. Participants expressed frustration with the communication and organization structures of the JTF and doubted that it would be retained or effective in future international disaster responses, indicating an absence of *DLL*. My conversations with HGOs led me to believe that *DLL* was absent at the local level because their only lesson learned was that they should make a plan for earthquake response, instead of addressing general communication and response principles on a broader scale but I may have failed to access the proper information during my interviews.

Matching Themes to Theory

Several of the themes that participants mentioned when describing successes of the response had parallels in complexity theory. The USCG response was lauded for its *flexibility* and *adaptability*. *Flexibility*, identified by participants as a responding agency's capacity to the communicate with different partners in pursuit of different objectives, is similar to the concept of *goal complexity*, but also included a willingness to maintain *permeable boundaries* and take *historical context* into consideration. *Adaptability,* which participants used to describe instances communicative action helping the response overcome unexpected obstacles, is similar to *strategic complexity,* but also shares aspects of *self-organization*, and their descriptions of adaptation often included references to *interaction complexity*. *Cultural translators* enabled both *flexibility* and *adaptability*. They helped an unfamiliar response communicate in Haiti by causing small-scale *cosmology episodes* and filling in gaps of understanding. By promoting relationships between the USCG response and

HGO publics, *cultural translators* infused the organization with a closer approximation of *requisite variety*, which resulted in greater *flexibility*.

Autonomy may be the most important theme to emerge from a complex examination of the response. Complex systems are by definition averse to centralization and reduction. Autonomous communicating and decision-making by trusted actors, which the USCG and its locally-experienced responders were generally considered, allowed the response to absorb *goal, strategic, and interaction complexity. Self organization* without autonomy is significantly more difficult, as evident in participant complaints about excess bureaucracy hindering quick action and effective communication.

The inefficiencies that responders attributed to excessive bureaucracy could have instead been the result of the nascent communication structure working towards a more functional organization, though one USCG responder shared a cynical perspective on the process: "We won't learn the lessons that we need to learn and change quickly or adequately enough for the next response…we're not quick to change." An alternate explanation may be the frequently cited security restrictions that many responders felt were excessive to the actual risk. *Autonomy* could have alleviated these issues as well, and can coexist with centralization as long as the centralized authority trusts its agents: the response to fears of mass migration serves as an successful example of this arrangement. The strongest support for *autonomous* operation I found is that the majority of highlighted themes central to the responses success were not planned prior to the response. Instead, they were introduced by experienced actors and organizations operating independently and immersed in the local context of

events. Many of these themes also emerged when I considered the response through the lens of problem solving theory.

Situational Theory of Problem Solving

I tested Kim and Grunig's (2011) Situational Theory of Problem Solving by picking problems identified by participants and examining the problem solving process from a communication perspective. Kim and Grunig labeled the STPS as an extension of the STP, and each of my problem solving scenarios includes one of the USCG's publics, but I have chosen for my test to include the USCG responders and communicators involved in each problem in the scenario. While I recognize this decision deviates from the application suggested by Kim and Grunig in their presentation of the theory, I believe that the embedded nature of crisis management requires a similarly embedded approach. Crisis managers are not some abstract managerial function removed from their publics, many times they are subjected to the same social forces, or in this case, the same catastrophes and problems.

I identified many more problems than I have room to address, so I chose three problems demonstrative of the larger grouping. The three problems I picked covered three planes of applicability: internal to the response organization, external to the response organization, and across the boundaries of the response organization. In their response narratives, participants described the communicative actions taken in solving the problems, which I attempted to fit into the model proposed by Kim and Grunig (figures 1, 2, & 3). The problems were:

⚼ Creating a communicative framework integrating the responding agencies: DOD, USG-civilian, and USCG (an internal problem).

⚼ Planning mass migration response and addressing public fear of mass migration (an external problem).

⚼ Restoration of HGOs to control (a boundary crossing problem).

Each of the problems I selected was reported by participants as solved by the time the bulk of the USCG response left Haiti in late February, approximately one and a half months after the earthquake.

Too Many Chiefs: The Problem of Integration

Integration was the "big ugly monster,"challenging the response effort. This scenario allowed me to test the STPS as intended by its authors because the joint response force fit the definition of a public. As presented in Figure 1, the problem of integration was viewed in similar terms by most participants and all recognized that there was a problem. The USCG and its interagency publics did not initially acknowledge similar levels of involvement; participants reported that the individualistic communication approach of some response agencies conflicted with the joint approach espoused by the JIC and JTF. Participants identified a consistent list of constraints, which combined with the conflicted perceptions of involvement may have decreased the situational motivation for the problem solvers and may explain why many participants reported a prolonged process of integration. Of note is the differing perceptions of justifiable presence, which may have influenced the level of bureaucracy manifested during integration - less certainty would contribute to a self-conscious response structure reluctant to act for fear of international reprisal, whereas low uncertainty of presence could

manifest as a less restrictive organizational framework, the equivalent of a carte blanche.

Respondents identified several characteristics of the USCG response matching the description of referent criterion. Kim and Grunig (2011) described the criterion as cognitive problem solving shortcuts created by previous experience, knowledge, or judgement patterns. USCG had a history of coordination with both civilian and military partners, which provided the decisional framework necessary at both the interpersonal and organizational level to communicate through a successful integration. The informational response was similarly facilitated by the existence of the JIC model, developed in the early 2000's and adopted by most of the responding agencies prior to the earthquake. The ability to reference an existing framework for the informational response decreased-- though it did not eliminate--the need for communicative action to solve the problem of integration.

Respondents identified information transmission as the most critical communicative action for solving problems of integration. Operationally, forwarding information allowed agencies to cooperate in the absence of formal organizational bonds and relationships. The DOD, traditionally tight-lipped about operational capabilities and missions, eventually loosened and began sharing response information with the rest of the response partners, but the USCG took the lead. The informational response pushed shared talking points, daily themes, and an overall USG image out to all the participating agency communicators, which fostered an integrated communicative effort.

Responses conformed to the three categories of communicative action. In general the successful actions conformed to the active categories of forefending, forwarding, and seeking information, matching the theoretically predicted results. Responders offered anecdotes where a lack of information forefending impeded the problem solving process, suggesting that passive communicative action did not support problem solving. Information seeking was highlighted as an important communicative action in both the informational and operational integration. Drawing on experienced responders – identified here as cultural translators – and conducting daily meetings to seek out emergent needs facilitated the integration process.

Working Ourselves Out of a Job: How to Restore Local Control

The problem of restoration crossed the boundaries of the response structure and entered the realm of the HGOs. Figure 2 displays the problem solving effort in the STPS framework. In this problem solving action, participants concurred on the problem, but opinions differed on the constraints and levels of involvement. Responders who reported low cultural familiarity perceived a weak work ethic in the HGOs, while responders reporting high cultural familiarity attributed the same attitudes to the trauma of the disaster. Responders reported disagreements over level of involvement; some responding forces saw their role solely as providing the needed aid to the afflicted populations while other responding forces saw their role as assisting the HGOs. Cultural translators facilitated the solution of this problem, using their familiarity with local systems to educate unfamiliar responders and maintain restoration as a primary objective of the response.

USCG experience served as the obvious referent criterion in restoring the maritime transit system. The USCG relied on responders who had working relationships with HGOs. Other responding agencies identified the absence of these relationships as an impediment to restoring local control. Responders who were familiar with local systems, communications practices, and attitudes were not only able to communicate better, but could identify systems that were functional by local standards even if they did not necessarily conform to American standards. Most importantly to problem solving, they were able to help unfamiliar responders adapt their decisional frames and see these situations in appropriate context.

Participants describing the communicative actions they took in solving this problem, focused on information forwarding. The problem solving that response forces engaged in to restore HGOs to control following the immediate medical response appeared to conform to the STPS model. The three communicative actions were not viewed as equally important by responders, but some aspect of each was present. Daily briefs between the USCG and HGOs fostered a collaborative transfer process by pushing information. *Cultural translators* made sure that unfamiliar responders were presented with the local knowledge they needed to operate without upsetting HGOs. Our discussions revealed limited use of information forefending and criticisms of insufficient information seeking by the responders. All of the HGOs I spoke with reported that the response could have conducted a better needs assessment. If the *cultural translators* had not been present, this failure to consider local perspectives could

have subverted the authority of the HGOs, harming the relationship and threatening the restoration.

Interesting to me were reports from the HGOs that the USCG followed a clearly defined plan throughout the response. I developed several possible explanations for this differing perspective. The Haitian agencies may have observed the USCG in action and assumed motive behind the motions. Alternately, the Haitian standards of a plan may be less stringent than the USCG standards. Finally, I acknowledge the possibility that the Haitian agencies I spoke with were reluctant to portray the USCG in a negative light, and thus consciously or unconsciously decided to credit responders with more organization than the responders themselves felt they had.

Reservations and Reassurance: Communicating the Mass Migration Response

This external problem changed over time. The first phase was proactively silent, the second phase was reactively vocal. The phase shift was primed by the USG granting TPS to Haitians who had been living in the US since before the earthquake. The JIC release of an out-of-context photograph of an overloaded Haitian ferry prompted fears of a mass migration, triggering the shift. In the first phase, USCG communicators had to prepare for a mass migration without detracting from the humanitarian image of the response. In the second phase, communicators needed to address perceptions in South Florida of an imminent mass migration. Communicators involved in solving this problem reported high levels of concurrence over the nature of the problem, the constraints they faced, and their level of involvement. The referent criterion was the history of interaction between the USCG and South Florida; the USCG had run public

awareness campaigns on mass migration for years prior to the earthquake, which contributed to the public fear.

With full concurrence from the problem solvers on all of the situational antecedents, we could expect this problem solving experience to hew most closely to the STPS model (figure 3). While communicators reported that information transmission and acquisition played a strong role in the problem solving process, there was minimal evidence of information selection as an important action. The closest example reported was one of forefending, when communicators ignored the JIC emphasis on the humanitarian image in order to promptly address public fear of a migration.

Matching themes to theory

The themes of *autonomy* and *cultural translators* emerged often in discussions of these three problem solving processes. *Cultural translators* at the individual and organizational level were essential for accelerating and streamlining the process of integration and restoration, acting in a similar pattern to the biological concept of a catalyst (Tortora, Funke, & Case, 2007). *Cultural translators* were able to identify and respond to the growing public fear of mass migration before any other communicators, navigating the Scylla and Charybdis of public fear and image crisis. The concept I have identified as *cultural translators* is similar to the concept of the *referent criterion*, but the *referent criterion* is a cognitive shortcut resulting in less communicative action whereas *cultural translators*, though they likely possess those cognitive shortcuts, are able to see the absence of such shortcuts in culturally unfamiliar agents and help them bridge the gap. On an organizational level, the USCG's past

experiences: integrating with military and civilian agencies, interacting with HGOs, and communicating with South Florida news media; seems to have increased the obligation on the USCG to engage in the communicative behaviors to solve the emergent problems. This finding challenges the definition of the *referent criterion* in the full scope of the problem solving process: though previous experience may lead to shortcuts, those shortcuts do not always decrease the communicative demands if they are not held by all agents in the process. *Autonomy*, an identified characteristic of USCG organizational culture, helped to alleviate the need for communicative action, and was identified by participants as a critical component of the problem solving process.

While *autonomy* and integration seem to conflict, I found that when locally experienced agents were excepted from rigid centralized regulation they reported greater efficacy in achieving the organizational goals. Equally important were reports from experienced personnel of addressing needs before they were identified by the overall response structure, thereby streamlining the entire integration process. *Autonomy* as described by participants incorporated two of the communicative actions: *information forwarding* and *information seeking*. *Autonomous* agents sought out information based on their local contexts and forward information up their chain of command that they feel is important, whether solicited or not. In the crippled communication environment of post-earthquake Haiti, these traits were essential in integrating the response effort. I also identified these themes at work in the other two problem scenarios. *Autonomous* agents ensured that HGOs were included throughout the restoration process, and the independent information seeking and forwarding of

communicators allowed the USCG to promptly address the public fears of mass migration. Only one example emerged of *autonomous* actions hindering any of the problem solving scenarios, but it could also be interpreted as a failure of information transmission. USCG medical responders failed to communicate with the HGO personnel on the ground when they were evacuating injured Haitian citizens to the USNS COMFORT. This failure of communication could have derailed the restoration process by excluding HGOs in the response, decreasing their involvement recognition. Despite the unrealized consequences of these scenarios, participant consensus was significant enough in many cases that I feel I can draw practical implications from both of the theories and from my study of the response.

Practical Implications

In four years of operational experience with the USCG, I have intercepted drug smugglers, searched for lost scuba divers, treated self-inflicted wounds on refugees, and responded to burning ships at sea. These are every day Coast Guard events, and all of those responses depended on organizational knowledge and checklists. In post-quake Haiti, responders and communicators quickly realized that there was no checklist for what they had to accomplish. From the moment the dust settled to the day the bulk of USCG responders left the country and the JIC went silent, the USCG and partner agencies were solving problems and communicating in a complex, uncertain environment. My research has demonstrated the descriptive efficacy of complexity theory and provided an important preliminary application of STPS. Additionally, I believe this study may also indicate normative possibilities for future response efforts and directions for

future research. None of my participants reported a specific theoretical framework that they employed, and I think that a real-world response would be under-informed if it was dependent on a single worldview. In this section I discuss overall practical applications rooted in the two theories.

The concepts of *cultural translators, adaptability, flexibility,* and *autonomy* combined and operationalized the concepts of the two theories. For future responders, the idea of the *referent criterion* might prove critical, especially knowing how to recognize which agents of a response structure possess it. The USCG did a capable job of this by drawing on its internal experience base, an action that any future international response will likely benefit from. For a crisis manager, simply calling in experience will likely prove insufficient, so I addressed managerial considerations for harnessing *cultural translators* in my analysis.

Local experience is a valuable tool for a response organization, as stated by director of the JTF General Keen (2010) in his post-response list of future priorities: "Protecting the people, understanding their culture, speaking their language, living among the populace, and developing a relationship with the community leaders," but that does not mean that organizations should depend on its culturally aware personnel to run the response. A case study of two medical clinics established after the quake illustrated this tragically (Rosborough, 2010): A clinic composed of localized responders with less experience operating in disaster situations than a clinic of recently arrived foreigners yielded significantly lower survival rates in its patients. Cultural awareness is complementary to, not a replacement for crisis management experience. The three actions that most

successfully tapped the experience of the *cultural translators* were conducting

needs assessment, fostering relationships, and assessing how actions will be

interpreted by local agents. An additional action that I believe the *cultural*

translators could have contributed to was conducting an effective security

assessment – balancing the security and agency of the response organizations

and avoiding the harmful consequences of unrealistic perceptions of violence.

Finally, I feel it is important to reiterate that the title *cultural translator* is often

a relative definition. An agent with more experience in a particular culture than

the majority of other agents will be a useful source of knowledge and guidance,

but would be best utilized as a facilitator of communication to promote

understanding rather than a long-term voice of the target publics.

From a centralized crisis management perspective, a*utonomy* may appear

destabilizing, but can also be extremely beneficial. An experienced *autonomous*

agent can address nascent needs, distributing and decentralizing both the

influence and the awareness of the responding agency. On the other hand, a

reckless or green agent left unmonitored can harm the overall mission, upset a

delicate balance of international relations, and generally get little done.

Hierarchy is inescapable in the federal response structure, and is advantageous

for many reasons, so balance is key. I believe that an organizational culture of

needs assessment, both internal and external, will address this. If *autonomous*

agents are treated as internal publics by response hierarchies, they will be able to

provide important feedback, voice needs, and be tracked.

The STPS provides a useful framework for managers to evaluate an agent's

potential to operate *autonomously*. Evaluating the motivational and referent

criteria of an asset can help determine its capability to engage in communicative action and solve problems. This suggestion may carry a higher level of risk than the federal culture of bureaucracy and centralization is comfortable with, but it is made in the context of an earthquake that was orders of magnitude more devastating than any response plan was prepared for.

Adaptability and *flexibility* are similarly troublesome concepts for a response organization to strive for. My study of this case revealed an unexpected duality of purpose: the USCG embraced a complex set of goals and strategies, but all were in pursuit of a singular end result. When participants reported that they showed up "without a plan" or "without goals," what they actually meant was that they showed up knowing that they needed to work themselves out of a job, but unsure how they would get there. This overarching goal served as a guideline for the response, allowing divergent actions, sub goals, and an overall objective to evaluate against. There were occasions where sub-goals came into conflict: continued USCG administration of the port may have been more efficient than HGO management, because of USCG experience high-volume vessel traffic, but that decision would delayed HGO resumption of control and extend the requirement of USCG presence.

The metrics set forth by complexity scholars for assessing a successful response might be the closest thing to a checklist that future crisis managers need. If viewed as a series of prompts, perhaps adapted to organizational specifics, the categories of *permeable boundaries, requisite variety, double loop learning, enacted realities and complexity absorption* serve as a useful cognitive

guide for assessing the development and execution of a response. A rough example of what this prompt-list might look like is included in Appendix F.

A final practical consideration is how to foster a problem solving setting among responders and communicators. From the perspective of a crisis manager, this can be useful in prompting autonomy and taking advantage of a decentralized system. My findings supported the STPS model, so I used it as my basis. In general, any actions that increase the situational motivation to communicate should increase communicative action. Managers could increase problem recognition by seeking organizational concurrence on the nature and scope of the problems and by polling response agents to determine their perceptions of the problem. Increasing involvement recognition is more complicated than saying: "We're all in this together." A manager must ensure that all participants recognize one another as partners, both inside and outside of the organizational boundaries, and that participants acknowledged and accepted their role in the response organization. Decreasing constraint recognition could be as simple as ensuring responders that their decisions would be supported in after action review, or could be a more complicated process of freeing operational resources to address responder needs.

To fully integrate STPS into practice, we must also consider how to facilitate the second half of the model. Communicative action requires infrastructure, which Haiti lacked. My research did not directly address the technical aspects of the USCG response, but revealed strategic complexity in USCG approaches to communications. Social media, satellite phones, VHF radios, hand held radios, courier services, and word-of-mouth transmission were

all harnessed to pass operational and informational messages and conduct needs assessment. I consider this a noteworthy practice of the USCG response, and a flexible approach to organizational communications to be emulated in future responses.

Limitations

A single case study of an organization does not offer a comprehensive view of a response, but the pool of USCG crisis managers involved in this response was small enough that I felt I was able to gather the majority of perspectives. I was only able to gain access to one of the primary USCG publics to seek a more holistic understanding of the response process, which limited my ability to answer RQ #2. Interviewing more members of the USCG's publics would have enabled a stronger assessment of how *cultural translators'* efforts to influence communication were successful or unsuccessful, and whether the absence of *cultural translators* affected the response negatively. I conducted my research 18 months after the earthquake struck, which may have distorted recollections of the response or may have enabled participants to find deeper meaning in what they experienced. Conducting additional studies of other organizations involved in the response would have provided valuable triangulation and would have allowed me to compare and contrast the effects of varied levels of experience.

The month I spent working and researching in Haiti yielded marginal gains in my cultural understanding. Throughout this thesis I have framed any commentary on Haiti as the perspectives of my participants, but my lack of understanding has limited my ability to assess the impact of cultural awareness. I was only able to identify critical points based on comparisons of responses, not

on my own experience and knowledge. This was also a limitation because I had no set metric for evaluating the cultural awareness of my participants. Their self-assessment of awareness, lacked a uniform definition and ranking system, complicating the validity of their evaluations. By contrast, I was able to assess practices that adhered to or deviated from USCG policy based on my nine years of military service.

My USCG service also needs to be noted as a limitation. No matter how hard I have tried to remain objective and reflexive, my *referent criterion* of service is a difficult decision frame to circumvent. My experiences carry the potential to obstruct results, fill in gaps of knowledge, and frame my research findings. I have tried in this thesis to be critical when it was necessary, though I was lucky to not find many situations requiring criticism. My USCG background also provided me unrestricted access to a wealth of internal knowledge, including thousands of documents compiled by the USCG historian, a military liaison in the US Embassy in Haiti, and the trust and confidence of most of the military personnel I interacted with. Overall, I am confident that my history of USCG service was more a boon than a curse.

Directions for Future Research

In the course of my ongoing research I discovered several other theories that seemed like they could explain aspects of the response narrative I assembled. Naturalistic Decision-Making (Gilpin & Murphy, 2008) describes the process of contextually embedded decision making in terms very similar to those used by responders with experience working in Haiti. A further comparison between that theory and my identified concepts of *cultural translators* and *autonomy* would

be a valuable assessment of alternate explanations. I was relieved to learn that I was not the first person to present the concept of a *cultural translator*. A 1995 meta-analysis of international PR practices by Grunig, Grunig, Sriramesh, Huang, and Lyra found the concept used by Greek PR practitioners working for international corporations. The study speculated that the concept should exist in most organizations seeking to interact with culturally diverse publics, but also suggested that it may not be distinct from the other four models of interaction they had identified. Though my research clearly applied the *cultural translator* concept to complexity theory and STPS, further research or application could validate or challenge their findings. As the US continues its involvement in foreign disaster response and crisis management, more case study opportunities will present themselves. The UN was an additional subject for study in Haiti that I was only able to interact with briefly, but the different approaches espoused in UN doctrine would provide a valuable contrast to the methods I examined in the USCG response.

Conclusion

My goal in this study was to reconstruct an international disaster response from a communication perspective and to identify whether cultural awareness or ignorance affected the response. My preliminary research created an expectation a severe conflict between the response and the Haitian culture it addressed, but I quickly learned otherwise. In speaking with USCG responders and communicators, members of HGOs, and other partner agencies, I discovered a more nuanced version of influence, experience, and judgement. The response was not simply a bunch of Americans arriving in the disaster ravaged third world, nor

was it the locally experienced Americans battling a horde of insensitive agents. Cultural understanding was important from a practical perspective; ensuring that responders interacted within locally acceptable standards likely facilitated the transfer of control back to HGOs. Without the awareness that *cultural translators* provided, the cultural dissonance may have delayed the restoration process. *Autonomous* agents expanded the awareness and influence of the central command, frequently fixing problems before they emerged on the organizational level or drawing attention to issues before they "grew legs." *Cultural translators* and *autonomy* infused the USCG response with *adaptability* and *flexibility*. Recognizing that, my hope was that I could make suggestions for future responses to do the same.

There is no guarantee that a response agency will have personnel familiar with the environment in an international response, but future responses stand to benefit from an internal search for experience. If identified, this experience can be used for *cultural translation*, an important tool for crisis management. In this response, *cultural translation* helped the USCG realize their end-state of returning control to local agencies and shape the image of the USG response, but in future responses it could be used to identify needs not apparent to foreigners, cement relationships for collaborative partnerships, or for other still unidentified uses. *Cultural translators* and other personnel with applicable experience may be treated as *autonomous agents*. Managers can evaluate their problem solving capabilities to determine how much trust and independence to assign them, and treat them as internal publics to ensure that their needs are met and also that they are operating in line with the overall goals of the response. Finally, I directly

applied the two theories to the response process, presenting a rough prompt-list for practitioners and discussing how to foster a problem-solving environment. Though all of my research has been from the perspective of the USCG, crisis management is an adopted responsibility of the US government, the UN, and dozens of international response agencies. It is my hope that the considerations I have highlighted here will better prepare our responders to serve and empower international communities in a complex world, because we will never be able to predict what lies around the corner.

Appendix A: Interview Schedule

Opening Statement:

Thank you very much for agreeing to speak with me. Before we begin, do I have your permission to record this interview? My name is David Connor, I am a researcher at the University of Maryland, and I am studying responses to the 2010 earthquake in Haiti. I hope to understand how the USCG shaped its response, and how it communicated with its various publics. Though I can not offer any reward for speaking with me, I hope that my research will contribute to disaster research in ways that will help save lives in the future.

My study has been approved by the UMD institutional review board, which oversees research ethics. This confidentiality agreement will discusses some of the concerns that the board addresses. Please read through it and sign it, and I'll be happy to answer any questions you have.

- Could you please tell me your age?
- What languages would you consider yourself functional in?
- What is your rank and position?
    - What was your rank and position at the time of the earthquake?
- Prior to the earthquake of 2010, had you responded to any disasters or attended any disaster training?
- Prior to the earthquake, had you visited Haiti
    - How would you self-rate your familiarity with Haitian culture, tradition, and customs?

RQ1: How did the US Coast Guard shape and implement crisis management with its publics?

RQ2: How did the publics of the US Coast Guard receive and respond to USCG communicative actions?

RQ3: How did culture/history influence communications between the USCG and its publics?

Interview Schedule

- Please walk me through your experience of the Coast Guard's response taking shape. (RQ1, 2, 3)

    - what did you perceive to be the driving forces of the response?

    - what were your critical concerns during the response, specifically with regards to communication?

    - in retrospect, do you feel that there were any signs or opportunities that you missed?

    - do you feel that there was enough information available to make decisions with confidence?

    - what changes did you observe in the Coast Guard's response structure across the course of the response?

    - did the plan consider Haitian culture and history or would it have been the same for other Caribbean countries?

- How well did the plan as you were familiar with it translate into practice? (RQ1)

- What stands out in your memory about the Coast Guard's response performance? (RQ1, 2, 3)

    - what did you feel was successful?

    - what did you feel was unsuccessful?

- what would you have done differently?
- How did the Coast Guard get its messages out? (RQ2)
- What was your perception of the message content sent to the Haitian people? (RQ2)
- Did you interact with the Haitian people during your course of the response? (RQ1, 2, 3)
  - what was the nature of your interactions?

Closing

Thank you for sharing your time and experience with me. I deeply appreciate your willingness to revisit this hard time in your life, and I will do my best to make sure that the experience you have shared with me will be used to better respond to future disasters. If you have any questions, or would like further information, please contact me via phone/email/mail. Thanks again for your help!

Appendix B: IRB Consent Form

Last Rev. 09 19 2010

Appendix A: Consent Form

Project Title	*Complexity in Disasters: A Case Study of the Haitian Earthquake Response*
Purpose of the Study	*This research is being conducted by Dr. Elizabeth Toth and Mr. David Connor at the University of Maryland, College Park. We are inviting you to participate in this research project because you are older than 18 and of your role and experience as a responder to the 12 January 2010 earthquake in Haiti. The purpose of this research project is to examine the response to the earthquake from the perspective of crisis communicators.*
Procedures	*You will be asked a series of questions. The researcher will ask your consent to record the conversation. The interview may take between 60 and 90 minutes. Following the interview, the researcher will request contact information in the event any further questions or need for clarification arise.*
Potential Risks and Discomforts	*There are no known physical, psychological, or social risks to the subjects.*
Potential Benefits	*This research is not designed to help you personally, but the results may help the investigators learn more about the process of planning and implementing response to natural disasters, especially in a cross-cultural context, which may improve the ability of disaster response agencies to better serve effected populations in the future.*
Confidentiality	*All identifying information will be stored in a password protected folder on the researcher's computer. Any printed documents and all recordings of interviews will be kept in a locked storage file that only the researchers have access to. If we write a report or article about this research project, your identity will be protected to the maximum extent possible. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law.* *In accordance with legal requirements and/or professional standards, we will disclose to the appropriate individuals and/or authorities information that comes to our attention concerning potential harm to you or others*
Right to Withdraw and Questions	*Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.* *If you decide to stop taking part in the study, if you have questions, concerns, or complaints, or if you need to report an injury related to the research, please contact the investigator, Dr. Elizabeth Toth at: 301-405-8077, eltoth@umd.edu, or 2130 Skinner Building, University of Maryland, College Park, MD 20742-7635.*
Participant Rights	*If you have questions about your rights as a research participant or wish to report a research-related injury, please contact:* **University of Maryland College Park** **Institutional Review Board Office** **1204 Marie Mount** **College Park, Maryland, 20742** **E-mail:** irb@umd.edu **Telephone: 301-405-0678** *This research has been reviewed according to the University of Maryland,*

UNIVERSITY OF MARYLAND, COLLEGE PARK
Institutional Review Board
Initial Application for Research Involving Human Subjects

Last Rev 09/9 2010

	College Park IRB procedures for research involving human subjects.	
Statement of Consent	Your signature indicates that you are at least 18 years of age; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study. You will either receive a copy or may print a copy of this signed consent form. If you agree to participate, please sign your name below.	
Signature and Date	NAME OF SUBJECT [Please Print]	
	SIGNATURE OF SUBJECT	
	DATE	

IRB APPROVED
EXPIRES ON

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Appendix C:

Table 1

Identified publics of the USCG response, message content targeting publics, and methods of communications.

Public	Messages	Methods	Targeted by
US News Media	-Tell the CG story -A mass migration was not occurring	-Press Conferences/Releases -Media packages -embedded journalists -interviews	The JIC & USCG communicators in FL
Haitian News Media	-the humanitarian nature of the US response. -Relief information details	-Press conferences/releases in Creole -visit to the USNS COMFORT	The JIC
International and Caribbean News Media	-Assuage fears of inter-Caribbean migration. -Counter invasion claims	-Press conferences -press releases -unified messaging	The JIC
Haitian Diaspora	Passing information on US policy and the response	-Community ties -Social Media -US News Media	The JIC & USCG Communicators in FL
HGOs (maritime)	-Logistical needs of response -restoration of port	-Face-to-face interaction -Daily meetings -JIC	Operational USCG Responders
Other USG Agencies	-Coordination of response effort -Coordination of messaging, themes	-Daily meetings -Satellite phones -Radio	The JIC, The JTF, Operational USCG Responders
Internal USCG publics	-Initial contact after the earthquake -Coordination between response elements -Transmission of imagery from the ground	-Social Media -Couriers -Daily meetings	Operational USCG Responders, The JTF
Haitian population	Not a primary public of the USCG		

Appendix D:

Table 2.

A complex systems view of USCG response and participating agencies

| Characteristics of a Complex System	USCG Response	USCG	USG Agencies	HGOs	Hait. Pop
Agent-based Interactions	Organizational level: The USCG was an agent in the JIC and JTF structure. Individual level: USCG personnel served as agents interacting with publics.	Individual: cutters, aircraft, on-the-ground responders, communicators. Organizational: IMT and ICS frameworks.	Typically described at the organizational level.	Agencies led by influential personnel. Interpersonal interactions could have organizational effects.	Typically described at the societal level.
Local Interactions	Killick HCG Base, PaP Airport, US Embassy, Florida IMC, PaP Port	USCG Platforms and Response Centers	PaP Airport, US Embassy	Killick HCG Base, PaP Port	All affected areas
Rule Based Interactions	USCG Ethos, USG mandate, JIC guidance, emergent JTF structure	USCG Ethos.	USG mandate. JIC guidance.	Restoration relationships.	Survival, martial law.
Recurrent Interactions	Daily meetings, humanitarian response actions, restoration effort.	Humanitarian response actions.	Daily meetings	Daily meetings, restoration effort.	Survival, restoration.
Interactions Producing Adaptability	Emergent JTF structure, JIC, PAO functions, Cultural translators,	Organizational learning Dual	Emergent JTF structure, JIC	Daily interactions with MTSRU	Social resiliency
Non-Linear Interactions	Needs-driven response pattern. Autonomous operation. "working itself out of a job," IMT response framework. JTF/JIC structure	autonomous/hierarchical operation.	Daily meetings to ID needs.	Balancing individual/org needs.	Social structures
Self-Organizing	Overloaded with responders, some lack of cultural awareness, capacity limitations.	IMT response framework.	JTF/JIC structure.	Returning to work post-earthquake	Community structures
Unstable	Needs-driven response, organic structure, deep reserve of personnel to draw from.	capacity limitations.	lack of integration, cultural awareness. "whole of government response"	Disaster damage, cosmology event.	food insecurity.
Dynamic	working relationship w/ HGOs, crisis management, military/civilian USG agencies.	"semper paratus: always ready"	FEMA, JIC, and history of crisis management	cultural familiarity with disasters	familiar with disasters
Historically Situated		seasoned crisis managers. crisis management capacity. experience working with foreign agencies.	joint response effort, interactions	working relationship w/ USCG	familiar with disasters, fond of USG
Permeable Boundaries	Interactions with HGOs, integration with USG agencies		w/ Haitian partners	affected by disaster	affected by disaster
Irreducible	Experienced responders suggest training a replacement wouldn't work	Multi-modal response force, bigger than any one capability	"whole of gov't response"	"Haitian mentality is complex"	Long history of difficulties

Appendix E: STPS Models of USCG Problems
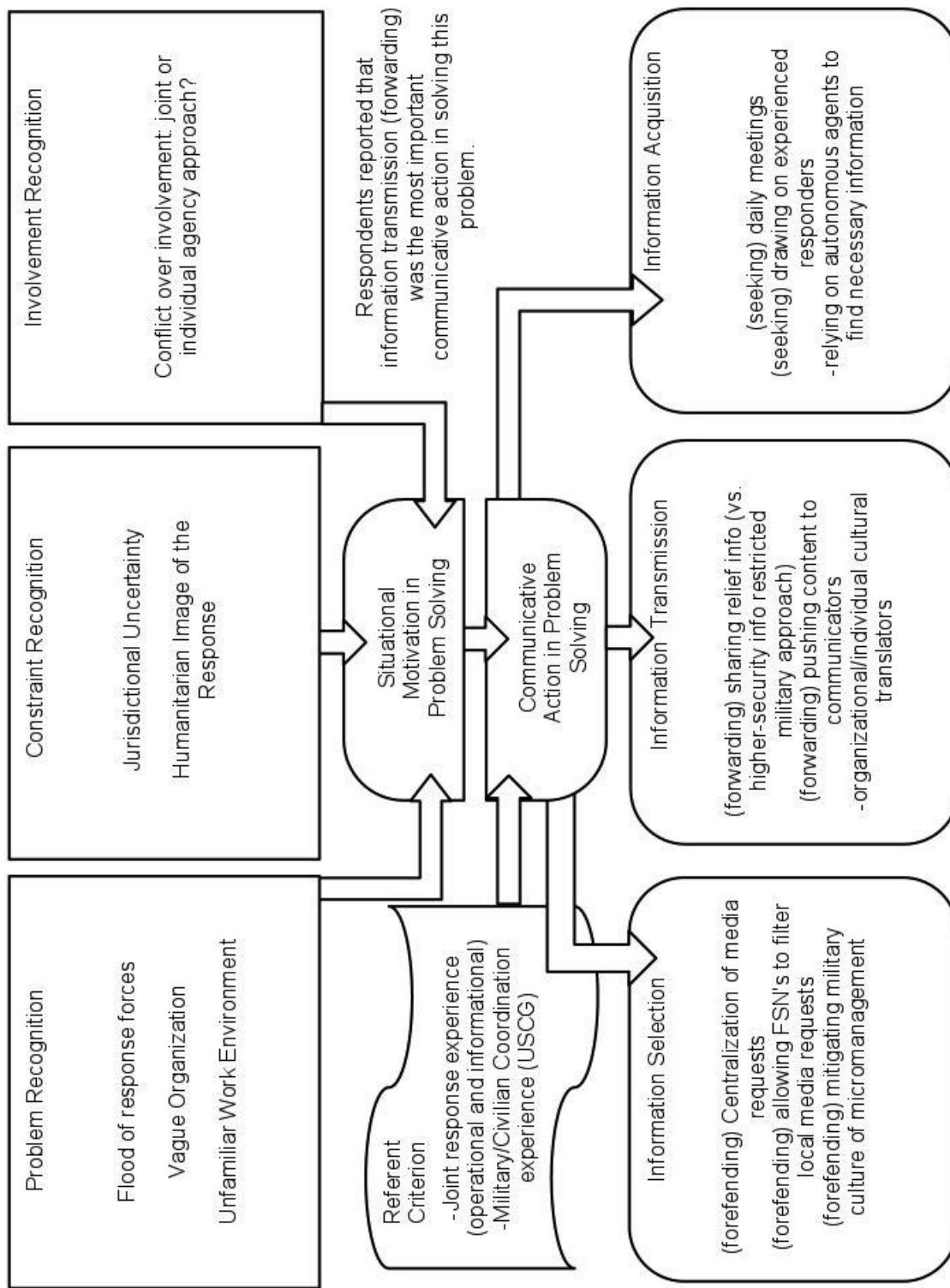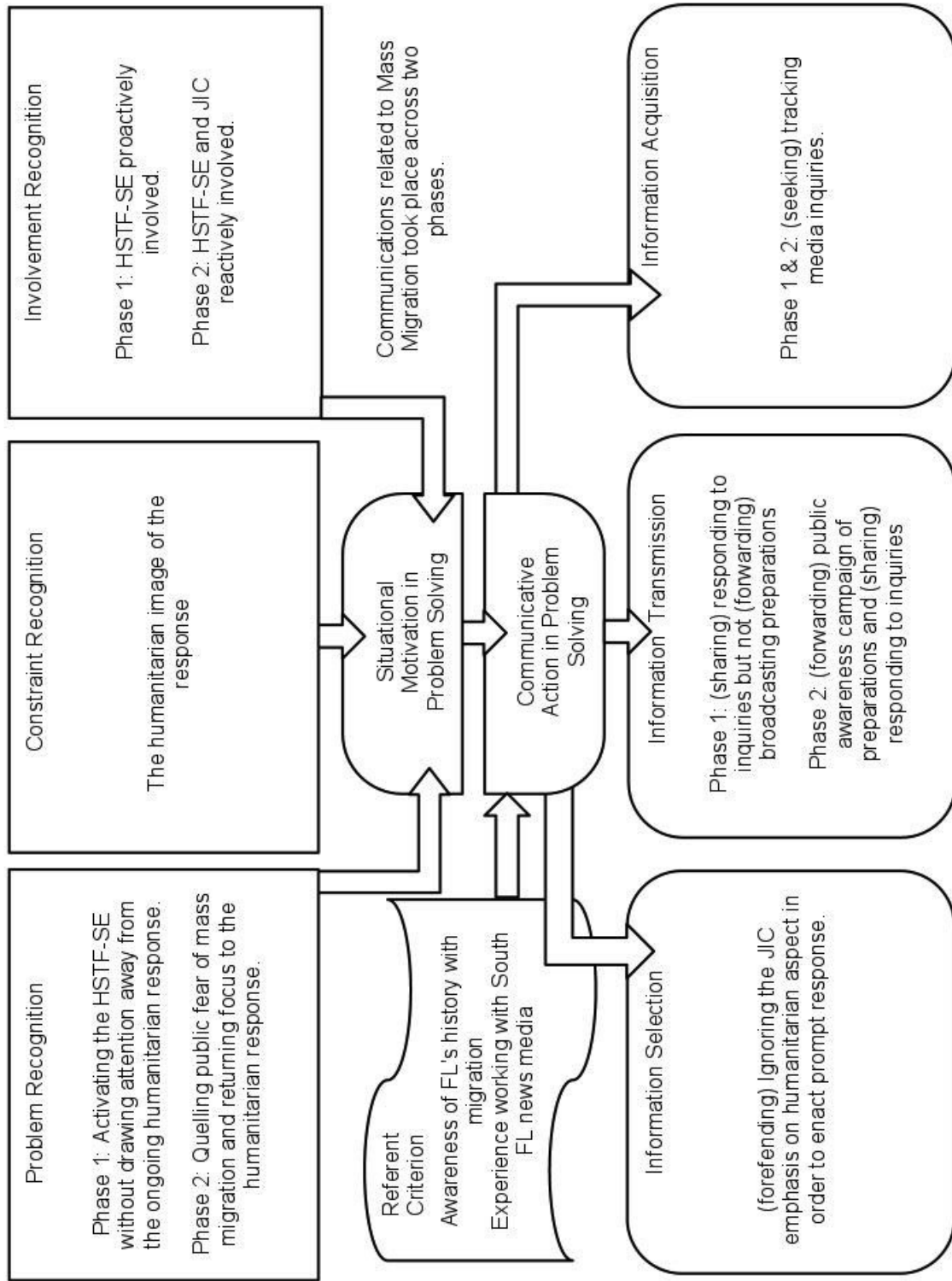

Figure 1. Integration problems in the STPS model.

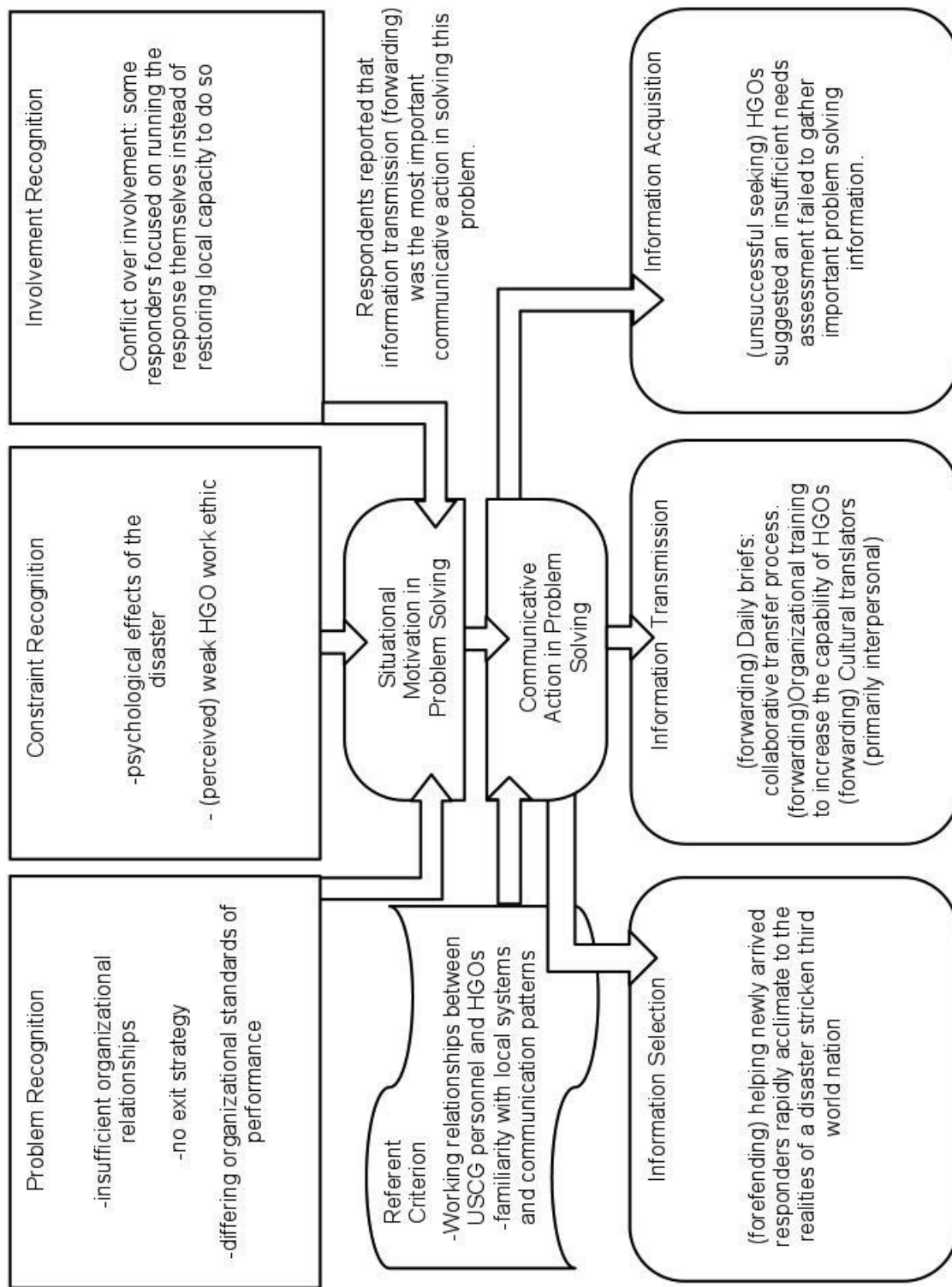**Figure 2:** Mass-migration problems in the STPS model.

Figure 3. Restoration Problems in the STPS Model

Appendix F: Sample Prompt-list for Crisis Managers

<u>Permeable Boundaries</u>

⚔ List who you are helping.

- ○ What have they identified as their needs?

- ○ What do you perceive to be their needs?

- ○ Can you justify any difference between the previous two answers?

⚔ Who are you communicating with (inside and outside the org)?

- ○ Do they have a similar perspective on the situation as you?

- ○ Do they have access to the same information? Do they need it?

⚔ If you could have access to one additional perspective, whose would it be?

<u>Enacted Reality</u>

⚔ What is your desired end state?

- ○ What prevents you from getting there?

- ○ What problems <u>must</u> you address?

  - ▪ If you had full confidence in your capacity, what action would you take?

- ○ What can you put off until later?

⚔ Are the agents within your organization:

- ○ synchronized

- ○ coordinated

- ○ integrated

<u>Complexity Absorption</u>

⚔ List your current goals.

⚔ List related goals/problems.

- ○ Who is addressing them?

- ⚔ If a beneficiary or a member at the lowest level of your organization had a critical concern, how would it get to the level needed to prompt action.

- ⚔ How is upper level messaging/intent reaching responders? Beneficiaries?

- ⚔ How are response assets communicating?

- ⚔ What can you do to accelerate your objectives?

Predicted Range of Outcomes

- ⚔ Who are you trying to communicate with?

- ⚔ Who is watching you?

- ⚔ Who are you trying to help?

- ⚔ The above three groups are your publics. Present each message/goal to a theoretical panel of your publics.

  - ○ How will each interpret it?

  - ○ Do you feel each interpretation is important?

- ⚔ If a US news outlet was covering an action you are considering, how would they report it?

Double-loop Learning

- ⚔ What has exacerbated the crisis? What is currently making it worse?

  - ○ Aside from directly assessing the needs, how can you improve your response?

  - ○ What aspects of the organization are hindering the response?

    - ▪ How can you remove obstructions?

    - ▪ Will it happen again next time?

⚔ If this crisis happened in the US, would your response be different? What about the other side of the world?

Requisite Variety/Autonomous Agents

⚔ List the members in your organization who are the most knowledge about the situation.

- ○ Can you tap their experience?

- ○ Do they have experience in disaster response?

- ○ How can you deploy them and stay aware of their needs and discoveries?

⚔ Do you have access to local perspectives? Can you get access?

Appendix G: Additional Findings

Mass Migration

According to participants, government planners do not consider mass migration a likely result of a single event, as one USCG communicator observed, "history has told us that's simply not true, and so the plan is predisposed to the notion that…mass migration's going to build up over a period of time." Despite that, the earthquake was seen as a potential trigger:

> At the time of the earthquake, someone said 'y'know, I'm not sure that we're going to have that kind of time. let's get the smart minds of the task force together and have you figure out how could we, if we had to, light off the mass migration plan quickly. How do we achieve that?'

which forced responders and communicators to implement the plan in days instead of weeks.

Florida, Operational Communication Response

The USCG Incident Management Team (IMT) was responsible for conducting needs assessment for USCG responders and re-establishing communication with USCG assets in Haiti prior to the earthquake. The response adhered to the terms of the Incident Command System (ICS), a flexible response framework that all USCG personnel receive training on. Though ICS was designed to enable California fire departments from different counties to integrate in battling forest fires, it is general enough to accommodate a broad spectrum of agency and disaster types. FEMA uses ICS, but the Department of Defense (DOD) and Department of State (DOS) do not, nor did the effected local agencies that the Coast Guard was working with. The response in Florida at the

District level was well practiced due to frequent hurricanes, though earthquakes and scales of destruction present in Haiti were unfamiliar. As one of the Florida-based responders admitted to me, "it opened our eyes to the possibility of having to respond to something other than a typical weather and mass migration scenarios that we play out routinely." The responder also noted that the existing plan was adaptable to fit the crisis describing the Incident Management Team (IMT), a component of the ICS:

> We didn't really have to vary our IMT that much, we just expanded it quite a bit as we started tracking more supplies and response effort as well as personnel who went down range...like our normal IMT on steroids...IMTs are scalable. We added additional elements such as the logistics branch at [Guantanamo Bay, Cuba], but we also added additional personnel because we were running around the clock operations.

Rapid expansion was possible in part because of the Coast Guard's extensive reserve personnel system, where USCG personnel in civilian jobs are activated either cyclically or in response to emergent needs. The IMT preceded a larger management effort by the Southern Command (SOUTHCOM) of DOD, and was able to provide guidance to the larger response.

The Vacuum Preceding The Joint Task Force

I accidentally omitted the word communication when asking one senior responder about overarching USCG concerns during the response and he suggested, "I think you're pointing your questions, I think, in a vacuum." His implication was not that the response lacked concerns, but that it was multifaceted and too diverse to be summarized in a single statement. The Coast

Guard response in Haiti coalesced in a piecemeal, disjointed fashion, eventually solidifying around the emergent structure of the Joint Task Force (JTF). A senior responder recounted the first days, when USCG personnel, "showed up at the embassy who just got on an airplane and came down there, they were ordered down there, it wasn't on their own behalf, the question was 'why are you here?' and none of them could answer that question," which was of particular concern in Haiti because, "If you respond to a natural disaster in the US, you just draw range rings and say 'OK, we can stay in this hotel here.' If you're responding to a third-world country which has suffered that much damage, you're sleeping under a desk." By the eighth day after the quake, the Coast Guard daily briefings indicate that all living facilities for inbound responders were full, suggesting that the ground response had reached capacity.

That same responder later observed that, "after a while more of the Coasties were really working for the Joint Command, the JTF commander...It fell into where it was supposed to be." Coast Guard integration into the JTF structure was attained via daily meetings and organizational negotiations. UN responders reported a similar process for integrating the new civilian response structure after the incumbent leadership was killed in the collapse of the Hotel Montana.

The effort to bring in appropriate personnel was hindered by a lack of "preparedness by Coast Guard communicators to be deployed downrange on short notice," as one responder noted:

> They weren't prepared to go down and be camped out at the airport for a long time. We didn't have our own [Meals Ready to Eat], we didn't have our own water, we didn't have our own shelter, we didn't have our own

sleeping bags unless they went to REI and bought it or something like that, so we were very ill prepared for that type of situation where we were going to be down in a foreign country for a long period of time. At the very beginning, we didn't have…the required immunizations before we could get even go into the country.

Responders also commented on a lack of required weapons training for personnel protection and the under-availability of diplomatic government passports as impediments to moving personnel from the US into the response structure.

Restoration

The restoration process was orchestrated by a US team called the Maritime Transportation System Recovery Unit (MTSRU), which the USCG contributed to. Additionally, a USCG Port Security Unit (PSU) landed two weeks after the earthquake to conduct port security and assist the local agencies in resuming control of daily operations. USCG Responders to the port noted that they acquired a number of infrastructural responsibilities simply because of the capabilities they provided, as one senior responder noted:

We came with all this equipment and forces, it's almost by default that we just kind of took it because they weren't doing anything. You had ships coming in, it's like 'somebody has to be in charge of these ships coming in and making sure it gets where it needs to.' And they weren't doing it.

He contrasted the scene they encountered with what an equivalent disaster response might look like in the United States, where federal agencies respond to state governments. In this case, he observed, "we were responding to nothing. So, we're not going to sit around and wait, so we just kinda started reacting."

Participants perceived the assumption of control necessary due to the pressing needs of the population, even if it took control away from the local agencies.

Autonomy

A USCG responder described the day-to-day formation of the response and how the ability to *autonomously* choose objectives became a necessity to keeping responders engaged with the response effort:

> They gave you tasking but it wasn't anything that was really, 'wow, this is bogging me down,' … That's why I had to constantly be thinking about 'ok, what else can we do, what else can we do?' Because you can just look into that young guy's eyes and say, 'OK, we can't have idle hands here,' because you know what happens then.

A UN responder highlighted the value of delegating responsibility to the forces on the ground:

> [We] came down with no plan, but were authorized for open action. This is important because, like any bureaucracy, UN actions are typically constrained by budget and must wait for votes of approval from the security council…we still had to account for everything…but we had our asses covered.

This enabled the UN to respond to emergent needs without the delay of higher-level review and approval. Open approval also provided assurance to responders that their decisions would be supported after the fact, decreasing one aspect of uncertainty in the decision making process.

Autonomy is a strong example of *structural complexity absorption.* The USCG as an organization encourages absorption of *structural complexity*. Many

USCG responder criticisms addressed instances of *structural complexity*
reduction; centralized command structure hindering the response's ability to
adapt to emergent circumstances.

Cultural Awareness

Other responding USG agencies also drew from their internal experience bases
with successful outcomes. A department of USAID granted most of its grants for
reconstruction aid to NGOs with experience working in Haiti and reported that
method as a generally successful strategy. One of the NGO participants I spoke
with, a senior Haitian national consultant for a major international NGO,
recounted his organization's process of drawing on responders with local
experience, an action he highlighted as critical for an effective response.

Glossary

Acronyms are cold and impersonal, but a case study of a military organization that neglected to use them would stretch on to verbose infinity. Below is a list of the acronyms I have used in my thesis.

DOD: Department of Defense

DOS: Department of State, occasionally used synonymously with the US Embassy

HCG: Haitian Coast Guard (a division of the Haitian National Police)

HGO: Haitian Governmental Organizations (used in this thesis specifically to denote maritime agencies)

HSTF-SE: Homeland Security Task Force – Southeast.

ICS: Incident Command System

IMT: Incident Management Team

JIC: Joint Information Center

JTF: Joint Task Force

MTSRU: Maritime Transportation System Recovery Unit.

PaP: Port au Prince, capitol city of Haiti.

PSU: Port Security Unit (a Coast Guard team)

SOUTHCOM: The Southern Command of the Department of Defense

STPS: The Situational Theory of Problem Solving

TPS: Temporary Protected Status

USAID: United Sates Agency for International Development

USCG: United States Coast Guard

USCGC: United States Coast Guard Cutter

USG: United States Government (used in this thesis specifically to denote government agencies involved in the Haitian earthquake response).

USNS: United States Naval Ship

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