

**NONGOVERNMENTAL ORGANIZATIONS IN DISASTER AND
COORDINATION:
A COMPLEX ADAPTIVE SYSTEMS VIEW**

by

Daryl Yoder-Bontrager

A thesis submitted to the Faculty of the University of Delaware in partial fulfillment of the requirements for the degree of Master of Science in Disaster Science and Management

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TABLE OF CONTENTS

LIST OF TABLES	v
ABSTRACT	vi

Chapter

1	NGOS, DISASTER AND COORDINATION.....	1
2	COMPLEXITY THEORY, COMPLEX ADAPTIVE SYSTEMS AND NONGOVERNMENTAL ORGANIZATIONS	16
3	METHODOLOGY	41
4	INTERVIEW RESULTS.....	57
5	DISCUSSION AND CONCLUSION	113
	REFERENCES	134

Appendix

A	RESEARCH QUESTIONS.....	140
B	RESEARCH PROJECT TIMELINE	143
C	NONGOVERNMENTAL ORGANIZATIONS INTERVIEWED	144
D	RESUMEN DE RESULTADOS.....	145
E	IRB APPROVAL LETTER	152

LIST OF TABLES

Table 4.1: Schemata Overview.....	64
Table 4.2: Participation in Alliances and Networks.....	70
Table 4.3: Website Mention of Alliances.....	83

ABSTRACT

Nongovernmental organizations (NGOs) play a major role in virtually every disaster around the world today. As they carry out disaster work NGOs are often grouped together as the “NGO sector,” although it is difficult to make broad generalizations about them as they vary widely in size, in the focus and scope of their work and their country of origin. Coordinating NGO disaster work has been an ongoing challenge for governments and for NGOs themselves for reasons ranging from the wishes of NGO funders to uncertainty about what coordination means to competition for funds.

This thesis uses a complex adaptive system (CAS) framework to understand how NGOs may coordinate their own work. A complex adaptive system is made up of a set of independent agents that interact with each other to form a whole entity without the benefit of an explicit central control mechanism.

The study carried out semi-structured interviews with 16 NGOs active in disaster work in Honduras to explore to what extent their interactions conformed to a complex adaptive systems analysis. It used six characteristics of complex adaptive systems – 1) schemata; 2) self-organization; 3) communication and information; 4) rules; 5) learning and adaptation; and 6) aggregate outcomes, and relations with government.

Results of the interviews showed that many NGOs have multiple links among themselves with active communication channels that depend heavily on personal relationships. Interviews showed that collaboration among NGOs has increased over the past decade, although the degree of cooperation among them was inconsistent. Interviewees found it difficult to name an aggregate system-wide outcome. Government relations were found to be mixed – many NGOs had both positive and negative things to say about their relationships with government.

The group of NGOs as a whole was found to have both characteristics of a CAS and factors that did not fit a CAS description. NGOs must continually invest energy to maintain a system because entropic forces away from increased organization remain strong.

Chapter 1

NGOS, DISASTER AND COORDINATION

Introduction

Around 9:00 in the morning some 40 people gathered in a room on the outskirts of San Pedro Sula, Honduras in the conference room of COPECO (Permanent Contingency Commission), the Honduran government disaster agency, chatting quietly with each other while they waited for the agency's new commissioner to arrive. Outside a large unkempt lawn appeared to be the depository for a good deal of the country's disaster response equipment. Inside the conference room about 20 people sat around the table, the rest in chairs in the back of the room and along the side with barely enough room between the table and the chairs to allow passage through the aisle. Some were in uniform – military, firefighters, Red Cross – some had insignias on their shirts, some wore plain street clothes. Most were men; a smattering of women sat in the chairs in the back.

Among the nongovernmental organizations (NGOs) present the buzz was that Moises Alvarez – the new COPECO commissioner – had earlier in his career been an employee of one of their organizations. When Alvarez finally arrived, a few reporters in tow, he said in a quiet low-key style unusual in a Honduran political appointee, that he wanted to strengthen community development, including improved enforcement of building codes, manage the agency's finances better, and develop an improved disaster prevention management program. He was very careful to include in his speech that all

needed to work together. “We are all here,” he said, “because the government has a very limited budget.”

“COPECO is all of us,” he ended his talk. “The system is made up of all public and private entities.”

This was the group of people who would be the leaders in responding if a disaster were to strike Honduras tomorrow. Approximately half of those present represented NGOs, all aware that they played a key role in the country’s disaster plans. One remarked that he was glad for the open way in which the commissioner had acknowledged their role. The NGO representatives present may well have wondered how they would coordinate their work not just with the government but with one another. At the same time as they were carrying out their work in conjunction with the government and each other, they would need to keep their own funding stream flowing freely to be able to complement the limited budget of the government. This thesis will consider how NGOs manage their work and interactions among themselves by qualitatively examining how 16 NGOs active in disaster in Honduras view their relationships and coordination with each other.

After a disaster strikes, a tangle of government and nongovernment agencies arrives on the scene to provide assistance to the affected communities. Some method of coordination is necessary to allow all organizations to do their best work, but sorting out how each agency will carry out their work and which responsibilities they will each take on can be a complicated task, “a bit of a game,” according to one NGO worker. The interaction among agencies that work side by side in disaster related work is a much studied phenomenon (Currion and Hedlund 2011, Gilman 2010,

MacCormack 2007, Helton 2001, Fisher 1997, Bennet 1995a, Ritchie 1995), an implicit recognition of the challenge of coordinating disaster work.

Most governments have carefully thought out disaster policies that set up national disaster response agencies and protocols which may or may not function well in actual disasters. Honduras' SINAGER law seems to be a well-crafted example. But how NGOs fit onto the scene, or how they relate to each other is not nearly as clear (Hedlund 2001, Coppola 2006).

Many studies have examined various aspects of how the overall disaster response system is organized. Public, private and nonprofit groups have been found to self-organize (Comfort 1994) into emergent response groups (Majchrzak, Jarvenpaa and Hollingshead 2007). Official, private and nonprofit agencies form networks in a disaster response setting that have no defining authority, but may share information (Tierney and Trainor 2003), and which require a good communications infrastructure which public and private agencies can use to coordinate with each other (Comfort and Kapucu 2006). If an effective disaster response is to be carried out a degree of trust must also be present among the various levels of government, private and nonprofit agencies that are present (Kapucu 2005).

Writing from an international disaster response context which can involve agencies from all over the world, Helton (2001) observes that coordination challenges between NGOs and the United Nations are endemic. Part of the challenge may be unique UN and NGO perspectives on what coordination means (Gillman 2010). Sometimes NGOs may not be certain if they should be coordinating with the UN or with the national government (Haddow, Bullock and Coppola 2010). Currión and Hedlund (2011) suggest that NGOs and the UN need coordination models developed

specifically for each unique context. Following a study of local, regional, national and international organizations operating in Haiti after the 2011 earthquake, Comfort, Siciliano and Okada (2011) observe that disasters are likely to expose the weaknesses of all responding agencies, no matter the nature of their origin.

Nongovernmental organizations are often overtly recognized as an important segment of disaster response systems (Fisher 1997, Helton 2001, Coppola 2006); all the studies cited above include nongovernment organizations in their analyses. But there are fewer investigations into how NGOs work together as a sector in disaster settings. Studying a disaster response effort in Mozambique, Moore, Eng and Daniel (2003) concluded that the “success of humanitarian aid operations ultimately depends on the ability of organizations to work together, (p. 316)” but did not look at how the organizations studied might do that.

It is common to group all NGOs together under a heading like “the NGO sector,” even though there is wide diversity in size, make-up, funding sources, amount of resources available, philosophical background and stated purposes of individual organizations. In disaster related work, NGOs are sometimes informally clustered together by those outside of the NGO world solely by virtue of being not-for-profit organizations that are working in some way in the disaster field, or they may link themselves to each other through more formal coalitions

In order to understand and work optimally within the NGO emergency response sub-sector, it may be helpful to look at NGOs as forming a system (Johnson and Prakash 2007), therefore along with Currion and Hedlund (2011) this paper will consider NGOs as a sub-system of disaster responders. It will explore whether that sub-system does some measure of self-coordination, even if that coordination might be

more implicit than overt, and appear messy and clumsy. By examining NGOs active in disasters through a complex adaptive systems framework, this research asks how NGOs see themselves in relation to one another and explores whether or not informal coordination may be happening even when there are no overt leaders among them. Through semi-structured interviews with NGO personnel in Honduras the research project hopes to gain a more complete understanding of how NGO collaboration and coordination in disaster related work are carried out.

Before proceeding it should be noted that the author of this paper worked for more than 20 years for the international non-governmental organization Mennonite Central Committee, first as a grassroots community development worker, then as a country level program director in Honduras and later as a regional director responsible for overall direction and administration of the organization's Latin America and Caribbean programs. In the latter capacity, he was responsible for directing and coordinating many disaster responses, including relatively large response efforts following Hurricane Mitch in Central America and the 2010 earthquake in Haiti. Inside experience in NGO administration may lend an advantage in understanding NGO perspectives. It may also color how NGO operations are perceived and interpreted, and thus influence data interpretation.

The years of experience working in the NGO context provided the seed that developed into this research project. Observing his own organization's work around disaster and bumping shoulders with many other NGOs also engaged in disaster work, gave rise to the question as to whether there might be an alternative way to look at NGO coordination. The remainder of this thesis is an effort to do that by asking if viewing NGOs through a complex adaptive theory lens may add insight into how

NGOs interact with one another. Before looking in more depth at the theory, the next three sections of this chapter will introduce the nongovernmental organization context in disaster work, first with an overview of literature describing NGOs in general followed by a look at how they fit into disaster work. The chapter will conclude by providing a list of obstacles that have been found to NGO coordination.

The Broad and Blurry World of NGOs and Disaster Work

When the United Nations wrote private or volunteer organizations into its original charter, it invented the term nongovernmental organization to describe not-for-profit agencies working internationally (Martens, 2002). NGOs, as nongovernmental organizations are commonly known today, are an ample and persistent presence in the current international humanitarian scene, particularly when disasters strike poor countries. But the NGO classification encompasses a broad array of organizations. Wei-Wen (2005) observes that the term NGO includes everything from small community-based organizations and national organizations working in their own, generally low-income countries, to large international organizations with multi-million dollar budgets whose headquarters offices are located in a developed country and whose work is implemented in many places around the world.

In many countries outside of the United States “NGO” is a catchall label for all nonprofit organizations, whether national or international. To distinguish local NGOs from international NGOs the term international nongovernmental organizations (INGOs) is sometimes used. Because this paper will discuss both NGOs and INGOs, the term “local NGO” will be used when referring specifically to nonprofit groups working within the country in which their primary office is located. “INGO” will

designate nonprofit organizations working outside the country in which their headquarters offices sit. “NGO” used alone will refer to both groups together.

NGOs are commonly recognized as major contributors to the field of disaster response. They have “significantly improved national and international relief agency efforts' abilities to address the victims' needs with their diverse range of skills and supplies (Coppola, 2006 p. 388).” It is, however, challenging to gain a precise idea of the scope of NGO reach or a summary of programs, given that NGOs come in all shapes and sizes (Helton 2001). Nor is there a good estimate of the number of existing NGOs. Writers are prone to say things like, the number of NGOs has “grown exponentially in the past few decades (Haddow, et. al 2010, p. 270),” or “there are hundreds of thousands of NGOs throughout the world (Coppola, 2006, p. 387).” Gillman (2010) estimates that there are 3,000-4,000 NGOs working outside of their home country and that approximately 260 consider disaster work to be a part of their mandate. More or less agreeing with that number, MacCormack (2007) adds that about a dozen large INGOs serve as NGO leaders in responding to a disaster.

Complicating the task of determining the scope of NGO work in disasters is the fact that the number of NGOs working in a specific country or location rapidly swells after a major disaster. New organizations form and many organizations that may not see international work or disaster response as part of their ordinary mandate arrive on the scene (Bennet 1995b, Coppola 2007). Before the 2010 Haiti earthquake, for example, there were an estimated 250 INGOs working in Haiti’s health sector. Just days after the earthquake there were about 400 health organizations officially registered with the Haitian government and “an additional unknown number of organizations also were providing services (CDC, 2010 p. 939).”

Just as difficult to estimate is the amount of disaster assistance money that is channeled through NGOs. MacCormack (2007) calculates that INGOs collectively expend about \$US 4 billion annually. According to Gillman (2010) INGOs disburse an amount of money that is close to the total that the UN outlays for humanitarian emergency aid. In addition to monetary expenses, Bjerneld, Lindmark, McSpadden & Garrett (2006) estimate that there are about 19 million people working for NGOs in both a paid and volunteer basis. INGO personnel make up about 90% of all the humanitarian workers; the remaining 10% are UN personnel (Gillman, 2010).

Although the scope of NGO work is largely determined by estimations, what is certain is that in almost any disaster around the world, NGOs will form a significant part of the system of agencies and organizations that develops to carry out disaster related work.

Emergency Response Systems

Large numbers of NGOs along with official and multilateral agencies, speed into immediate action following a major disaster. Whether they are rapid response agencies, organizations geared toward longer term recovery, or perhaps groups that have not previously responded to disasters, all need to gear up to carry out emergency response missions in new places and contexts. The hectic environment following a disaster may undercut administrative structures (Corbacioglu and Kapucu 2006), making it difficult to predict which tasks a particular organization will take on, or how those tasks will be coordinated (Majchrzak, et. al. 2007). Good collaboration among groups that are responding will result in a more efficient response (Kapucu 2005). Nevertheless, coordination is difficult as NGOs and others throw themselves into a setting that Katoch (2006 p. 145) aptly calls a “unique high pressure caldron.”

Affected communities and responding groups need to learn and adapt to the new situation quickly in order to continue functioning in the disaster-altered environment (Corbacioglu and Kapucu 2006). In carrying out their disaster work they will bump into each other like ingredients simmering in a giant pressure cooker of soup, each adding its own unique taste to the overall flavor. Coordinated collaboration is obviously needed, and just as obviously, a considerable challenge.

The needs of communities, families and individuals affected by the disaster combined with such things as international and local media reports and the chatter of social media, applies tremendous pressure on all who respond. NGOs operate in the larger disaster environment, but they also make decisions according to the information and feedback that they are getting from fellow NGOs. They may achieve their goals more efficiently by pooling resources (Johnson and Prakash 2007) but a search for efficiency may not be their highest priority. Rather groups and organizations are thrown together into the disaster arena for reasons such as their internal mission to aid the needy or because funds are available for this particular task. They find themselves working alongside each other in what often are unplanned joint efforts to carry out a multifaceted work that no one of them could accomplish alone. Together they form a system of agencies doing work in disaster settings.

It is also important to note that the international environment in which NGOs and others act is often unregulated. The literature on coordinating NGOs refers as often to UN leadership as to a national government role (Bennet 1995a, Coppola 2007 Helton 2001). Governments that have suffered a large disaster want the services that NGOs can offer, but can be overwhelmed by the sheer number of organizations that become involved (Helton 2001, Bennet 1995b). Foreign governments may add to the

inability of national governments to coordinate a disaster response on their territory by preferring to fund NGOs rather than governments of affected countries (Bennet 1995b).

NGOs are accountable to their donors, whether funds come from foreign government grants or small donor contributions, rather than to national government coordination efforts. They may duplicate each other's services or miss altogether places where attention is needed, to the chagrin of local and national governments (Helton 2001). National governments are caught in the bind of needing the services NGOs have to offer but not being able to carry out the coordination that they might like to. There have been calls for reform. Helton (2001) for instance, recommends institutionalizing nascent attempts at agency consolidation. NGOs, however, are often fearful of reform efforts believing that it will limit their reach or compromise their neutrality (Helton 2001).

NGOs may resist reform, but together with other agencies, they may reconfigure their working relationships in a disaster setting. Comfort, et. al. (2011) in their study of the 2010 Haiti earthquake observed that new networks of organizations emerge when disasters cause urgent needs. Emergent groups can be characterized as collectives of individuals and other groups that do non-routine tasks with non-routine organizational configurations (Majchrzak et al 2007, Drabek and McEntire 2003, Stallings and Quarantelli 1985).

Disaster literature recognizes that groups of responding agencies might together form a response system that adds up to more than the number of individual agency responses. The Organization for Economic Cooperation and Development (1999) urges evaluators of humanitarian aid responses to complex emergencies to

examine the system of agencies as a whole. “The intervention of a single agency cannot be evaluated in isolation from what others are doing, particularly as what may seem appropriate from the point of view of a single actor, may not be appropriate from the point of view of the system as a whole (OECD 1999, p 23).” Moore, et. al. (2003) concurs that in order to see what is really happening in a disaster response setting the entire organizational framework should be examined. Even though all agencies pooled together make up the whole system that carries out disaster work however, the NGO parts of the system do not necessarily see themselves as fitting into the larger system’s coordination efforts. There are many barriers built into the universe of NGOs that impede deferring to explicit coordination.

NGO Coordination

Considered as a collective, NGOs carry out a complete range of disaster related work. But because the NGO sector is made up of dozens, or in a major disaster, hundreds (Copolla 2006), of individual units of all sizes working alongside one another and implementing a broad array of activities, work may appear to be carried out in an ad hoc, unorganized fashion. Although almost all large humanitarian projects have some form of coordinating mechanism, managing the NGOs involved has frequently been likened to herding cats (Currion and Hedlund 2011).

There is little research which explores how NGOs coordinate work among themselves or how they view and implement collaborative work in disaster settings. Currion and Hedlund’s (2011) report written for the International Council of Voluntary Agencies attempts to describe NGO attitudes toward coordination, although it reads as a sort of apologetic for NGOs which seeks to explain NGO views on coordination to the government and multilateral agency world. Consequently, it tends

to be more prescriptive than descriptive, informing the non-NGO world how NGOs would like to be coordinated. NGO self-coordination, say the authors, is often concerned with security or is a response to other attempts to coordinate them, rather than a collective effort to manage their work. One of the lessons that Currion and Hedlund (2011) draw from their study is that coordinating efforts should be specifically designed for each setting, rather than expecting NGOs to conform to a one-size-fits all coordinating mechanism that can be used in all settings.

The meaning of coordination in humanitarian assistance has seesawed between a more top down conception that uses policy to direct the division of responsibility and a more organic and informal organization of work that Currion and Hedlund (2011) term “coffee-house coordination.” They report that governments and inter-governmental agencies usually prefer that coordination be done through a unified and hierarchical structure. NGOs, on the other hand, usually want non-hierarchical, bottom-up coordination systems which leave their independence intact. Traditionally, observes Copolla (2006), NGOs have resisted what they perceive as external control over their activities.

For a variety of reasons, natural barriers to effective coordination are practically written into the DNA of the NGO sector and its intersection with disaster work. First, all NGOs are beholden to the wishes of their donors. Although Currion and Hedlund (2011) state that no study has empirically proven that funders inhibit coordination, others (Gillman 2010, Sylves 2008, Coppola 2005) find that funders and others external to the disaster efforts may be a coordination stumbling block. Deferring to a coordinating body carries with it the risk of being prevented from

carrying out the mandate that their donors have given NGOs, whether that donor be an exterior government, a foundation, or hundreds of individual supporters.

Second, coordination among organizations requires institutional resources (Curron and Hedlund 2011, Gillman 2010, Copolla 2006). NGOs that have pledged to donors that their contributions would be spent directly aiding disaster victims, may not want to spend their valuable assets of time and money on coordination activities. Curron and Hedlund (2011) state that scarce resources are the single biggest impediment to NGO participation in formal coordinating bodies. In addition, participation in a coordinating effort may be perceived as little more than membership in a larger bureaucracy (Bennet 1995a) and therefore not a good use of funds.

Third, there is no consensus as to who or what should constitute the coordinating body; in some disasters there is more than one coordinator. Copolla (2005 p.397) cites several humanitarian emergencies where “two entirely separate NGO coordination mechanisms...developed, one for local NGOs and one for international NGOs.” The UN may assume that it plays the primary coordinating role for international bodies in a major disaster through its cluster system (Gillman, 2010), but there is no binding agreement that assures that NGOs will grant the UN that role.

Fourth, in disaster sites NGOs may come and go quickly so that coordinating bodies are not sure who they are working with at any given moment (CDC, 2010). Comfort et. al. (2011) found that after the 2010 earthquake in Haiti the number of organizations involved in earthquake response increased dramatically in the days following the earthquake, but declined rapidly in the following weeks.

Fifth, official agencies and NGOs often have differing visions of what coordination means. Coordination may be seen as simple information sharing or it

may be careful sector by sector organization as the UN cluster model attempts to do. Many NGOs see coordination as a bottom up activity, with the decision making locus being the program level staff. The UN and most governments, on the other hand, tend to see coordination as more top down, with decisions made at the national or even global level (Currion and Hedlund 2011, Gillman, 2010).

Sixth, NGOs may feel that through coordination, governments and inter-governmental organizations are attempting to coopt them, compromising their neutrality or perhaps their chosen bias (Bennet 1995a).

And finally, NGOs are essentially in competition with one another for funds and places to work (Gillman, 2010). Joining a coalition or a coordinating body muffles their individual advertising potential.

In spite of the many barriers, however, there is common recognition that coordination is a crucial aspect of disaster response. "...Interagency coordination is important and, ultimately, if improved would allow the international community to save more lives" (Gillman, 2010 p. 22). In a hopeful note, both Copolla (2006) and Currion and Hedlund (2011) observe that INGO resistance to coordination seems to have declined in recently years.

NGO coordination is a complicated affair, sometimes formal and well-organized, sometimes more of the coffee shop variety that seems almost invisible. However tightly or loosely they are coordinated, the way in which NGOs collectively carry out their activities merits understanding in a more complete way in order to take better advantage of the contributions which they have to offer (Fisher 1997).

Complex adaptive systems (CAS) theory, a branch of complexity theory which builds on that theory to look at organizational structures among other things, has been

used to study how many different types of organizations, agencies and private citizens interact with each other in a disaster setting and will be used in this study to help explain NGO behavior in disaster work. Chapter 2 first describes complexity theory and then moves into complex adaptive systems to show how CAS frameworks have been applied to the interaction of disaster agencies in general. It will then propose using complex adaptive systems theory to better understand NGOs working in disasters and conclude with presenting the research propositions which were used to explore whether groups of NGOs working in disaster fit the characteristics of a complex adaptive system.

Following the presentation of the theory in general, the third chapter outlines the methodology which was used to gather and analyze data for the study and describes the larger context in Honduras in which NGOs operate. Chapter 4 summarizes the results of the interviews and explores the ways in which NGOs may fit into a complex adaptive systems framework and areas where they may not. And finally the fifth chapter discusses the implications a complex adaptive systems view may bring to understanding the work that NGOs active in disaster carry out, along with other insights that the interviews with NGO personnel highlighted.

Chapter 2

COMPLEXITY THEORY, COMPLEX ADAPTIVE SYSTEMS AND NONGOVERNMENTAL ORGANIZATIONS

Complexity Theory

Physical science theory has often been used to shed light on social organization (Grobman 2005); complexity theory, with origins in biology, physics and computer science (Ferreira 2001) is proving to be an apt framework for also understanding social phenomena (Innes and Booher 1999). Corbacioglu and Kapucu (2006) believe that most social systems can be characterized as complex systems. Byrne (1998) says complexity theory provides social scientists with a multidisciplinary “tool bag” of concepts with which to examine social phenomena. Before moving into complex adaptive systems theory, which will be used as the primary lens for examining NGOs in disaster settings, a brief overview of complexity theory will allow a better understanding of complex adaptive systems theory.

In the 18th and 19th centuries the world was seen as functioning much like clockwork; Newton’s laws of physics provided a basis for understanding the world as machine. In the early part of the 20th century organizational designers followed a machine-like paradigm to set up bureaucracies, with centralized control, clear division of labor, and standardized tools, each bureaucratic cog performing its specific function. Planning, rather than improvisation was valued.

Today inter-organizational collaborations are considered vital to effectively carry out particular tasks (Knight 2002, Kapucu 2005). Traditional organizational

boundaries are becoming more porous through strategies like increased use of consultants, outsourcing (Grobman 2005), recognition of cross-organizational relationships, the prevalence of collaboration (Comfort and Kapucu 2006) and creativity. A machine paradigm no longer seems adequate to explain the way organizational systems function, but rather appears to attempt to force linearity and order onto non-linear realities. Social systems navigating uncertain and changing environments behave more like organisms (Innes and Booher 1999) than mechanical objects. Complexity theory provides a theoretical framework for understanding the relationships among a set of interconnected parts of a larger whole that do not appear to follow a predictable linear path (Anderson 1999).

Complexity theory assumes that if A happens then either B or C or even an outlier like F may happen, depending on small variations in A. Over time, small changes in A may or may not produce large changes in B and/or C (Byrne 1998). As a system experiences event A and considers options B and C, it is interacting with its environment and adapting to conditions it finds there (Grobman 2005). If the external environment is changing, the system in question needs to take in and assimilate situational feedback, study its options, and then decide whether to maintain the status quo, bend a little, or change radically. The system needs to find an option that will not only ensure its survival, but also result in optimal functioning. If it chooses status quo it may continue with business as usual, or it may find itself too rigidly brittle and be threatened with cracking apart. If it chooses a radical change, it may find that it is meeting a new situation with the necessary new vigor, or it may find that it has changed too much too fast and be threatened with disintegrating into chaos. A system faced with a changing environment needs to find the balancing point between order

and disorder, or, in more organizational terms, between flexibility and stability (Grobman 2005). The critical point may be options B or C, the more status quo outcomes, or it may turn out that a more unexpected option F may be how a system reaches equilibrium between flexibility and stability. This point, called the edge of chaos, is where systems can evolve but not self-destruct (Anderson 1999) and where the most creative learning and adapting actions happen (Grobman 2005).

According to complexity theory, then, complex systems are made up of agents (Rhodes et.al. 2011) that follow non-linear patterns (Byrne 1988), operate within the boundaries that allow them to be identified as a system (Rhodes et.al. 2011), follow a set of understood rules (Anderson 1999), and experience lever points (Holland 2006) which can propel them into evolving into a more orderly state (Anderson 1999). To those observing them they are moving targets; their processes, rather than their end results, should be the focus of study (Holland 1992). Probabilities rather than certainties are more likely to be found (Holland 2006). Understanding organizational systems in this way will give a theoretical foundation to the complex adaptive systems concept that will be used to examine NGOs as they work with and around each other in disaster settings.

Complex Adaptive Systems

Complex adaptive systems theory, a branch of complexity theory which assumes that the individual parts of a complex system will seek a higher level of organization (Anderson 1999), provides one way of better understanding the organization that happens when individual parts of a larger whole interact (Rhodes et. al. 2011) with one another. Complex adaptive systems can be defined as sets of independent agents that interact with each other (Zimmerman and Hayday 1999, Innes

and Boohar 1999) to form a whole entity (Anderson 1999) without the benefit of an explicit central control mechanism (Holland 2006). CAS theory is an attempt to explain how the actions and interactions of independent agents achieve the results each agent is hoping for (Rhodes et al 2011). Their ability to self-organize allows a higher state of order to emerge from their interactions (Comfort 1994). The interconnectedness of CAS agents implies that one agent's action will likely affect all agents. But since agents do not know how their actions might affect other agents, it is assumed that they will act in ways which they expect will be of greatest benefit to themselves (Anderson 1999). A set of rules or patterns of interactions that agents follow facilitates the relations and exchanges among them (Grobman 2005).

If, as Holland (2006) pointed out in the previous section, CAS have lever points and if their actions are not completely predictable nor are they random, as Byrne (1998) asserts, then they are non-linear in nature; it will be hard to predict when a given action or decision will become the basis for a major change. Affirming this understanding, Corbacioglu and Kapucu (2006) state that CAS do not follow regular patterns, but rather make decisions based on environmental feedback they are receiving. Although their starting point is important, two systems beginning at the same place may swerve apart dramatically as time passes and end at quite different places.

Various writers have identified sets of characteristics to describe complex adaptive systems (Rhodes et.al 2011, Holland 2006, Anderson 1999, Byrne 1998, Comfort 1994, Holland 1992); many complement one another. Comfort (1994) emphasizes that CAS adapt, Holland (2006) and Anderson (1999) say they evolve, a slight distinction which each add depth to the other interpretation of complex adaptive

systems. Other observations challenge one another to look at CAS from a different perspective. Some scholars emphasize action and the process of adaptation (Holland 1992, Comfort 1994) while others stress an outcome in addition to the process of getting to the outcome (Rhodes et. al. 2011). Byrne (1998) seems to assert that the evolutionary processes that complex systems experience is irreversible, which is an apparent contradiction of the concept of entropy (Comfort 2011) – a notion to be discussed below that maintains that systems can regress into lower levels of organization when there is no source of energy that keeps a higher level of organization running.

The nine characteristics that follow are relevant to the behaviors of the set of NGOs active in disaster and represent an attempt to outline a composite description based on the observations of a number of CAS scholars. These characteristics, as they are presented here and as they were utilized in the study, tend to result in a snapshot of what CAS might look like in a frozen moment in time rather than a moving picture that focuses on the processes that characterize the constant adaptation of a CAS. They are designed more to identify that adaptation happens, for instance, than describe the process of adaptation.

1. **Boundaries.** Complex adaptive systems are made up of a set of agents; to know which agents among all the possible agents form the CAS there need to be boundaries demarcating the system (Holland 2006, Rhodes et. al. 2011).

2. **Internal environment.** A boundary by definition will create an internal environment – a space inside of which member agents with relationships with each other interact and make decisions to act. As agents interact they must deal with the context that their relationships create. The sense of cooperation or competition and

each agent's access to resources are among the factors that make up the internal environment (Rhodes et. al. 2011) and affect the tenor of interactions among agents.

3. External environment. Boundaries also imply an external environment (Holland 2006), sometimes called the landscape (Byrne 1998) in which a system as a whole acts. As agents jostle against each other they are seeking the environment which will fit them best, or their "fitness landscape," a concept borrowed from biology to describe variations in the environment in which an agent moves. Landscape variations give agents options to benefit themselves (Anderson 1999) but they must be aware that landscapes may change as their own actions and those of other agents modify the overall environment (Byrne 1998).

4. Schemata. Recognizing that the character of each entity will influence the overall functioning of a complex system, Anderson (1999) identified the internal dynamics of each individual agent as schemata. In social organizations this might be equated with the organizational world view, culture and character which each agent brings to the larger system. How an agent responds to external stimuli depends in part on its starting place (Comfort and Kapucu 2006); the schemata form an important part of the starting point of each organization.

5. Self-organization/emergence. Self-organization is the ability for a new entity that acts as a whole (Holland 1992) to emerge from the interactions of agents engaging with each other without a top down authority directing the process (Rhodes et. al. 2011). When a common goal is perceived by various agents, (Comfort et. al. 2011) new and often unpredictable configurations of relationships emerge (Rhodes et.al. 2011) and a new sense of order develops among the agents involved (Comfort

1994). As long as new energy is invested in the system (Comfort et. al. 2011) it can move to a higher level of organization (Holland 2006).

Comfort (1994) asserts that organization cannot be imposed by some external force. Neither can external forces inhibit organizing activities if the system is to move to a higher level of organization. On a continuum between flexibility and stability (Grobman 2005), agents need to find the balancing point between the flexibility needed to organize into a new kind of system and the stability of either quickly developing a new routine or maintaining the old order. Both can stifle creativity and run the risk of causing the system to fall into a state of disarray that results in the disintegration of the emerging system.

6. Communication/information. Communication among agents can be in any form – direct, indirect, nonverbal, verbal, written, observation of cues – and is so crucial to the adaptation and learning process of a CAS that Comfort (1994) calls communication and information flow the building block with which a CAS is constructed. Communication channels which facilitate the flow of feedback and other information from both the external and internal environments must transmit information as smoothly as possible in order for a CAS to function (Comfort and Sungo 2001).

7. Learning/adapting/evolving. The ability to learn, adapt and evolve is a key CAS characteristic (Holland 1992) and a strong asset of complex adaptive systems (Comfort and Kapucu 2006). As agents interact with each other and their environment they receive feedback through the communication channels from both internal and external environments. They analyze incoming information, make decisions, evaluate them, reject poor ones and maintain good ones (Comfort and Sungo 2001). As

individual agents make decisions, other agents receive news of that decision which, in turn, affects their own decisions. Particularly in scrambled situations with frequent and rapid alterations in the internal and external environments, the information coming in can be haphazard and incomplete, making learning and adapting challenging (Brower, Choi Jeong and Dilling 2009). But it is this process of receiving information, acting on it, assessing and adjusting, that determines the complex adaptive system's collective action. Learning takes place as the process leads to new decisions. New patterns develop that may be quite distinct from the original configurations (Innes and Booher 1999); the system as a whole evolves into a higher form of organization.

This positive evolutionary process is not a sure thing, however. All systems experience entropy, a concept adapted from the second law of thermodynamics which asserts that isolated systems cannot move toward a state of greater organization, but will instead increase their entropy, or disorganization (Uffink 2001). In social organizations entropy is a natural pressure that pushes any social system toward looser organization if there is no input of energy to keep the system organized. When a social system finds a source of energy from its external environment it can develop into a more complex structure (Byrne 1998). Entropic pressure is stronger when CAS agents feel they are being manipulated or if individual agents feel their views are being suppressed. As agents drop out of the system the whole system loses learning potential (Innes and Booher 1999).

An understanding of resiliency and efficiency may also help explain how a system resists the natural entropic pressure toward greater disorganization. In a study of the trade-off between resiliency and efficiency in networks Brede and de Vries (2009) found that efficient systems had short, strong links between agents. Resilient

systems, on the other hand, had longer and less optimal communication paths binding agents together, rendering them less efficient but more able to withstand pressures and interruptions.

An agent that is connected to other agents by many flexible links, even if some of them may feel redundant, seems more likely to allow the links to adapt and bend, molding them into connections that are meaningful. If links to another agent prove ineffective in passing information or aiding in the work there are other links that will do it. Agents that are connected to others primarily by shorter, more efficient, but more rigid links seem more likely to simply allow the link to break and allow the system to move again toward less organization or more entropy.

8. Rules. Complex adaptive systems usually develop a set of rules which grow out of agents' communications and interchanges (Holland 2006) and guide the interactions among them (Grobman 2005). Holland (2006) believes that the rules which regulate relationships among agents are so significant that he terms them the building blocks which facilitate the formation of a CAS. He does describe CAS rules as developing out of the interaction among CAS agents, however, which appears to make his concept of CAS building blocks somewhat consistent with Comfort's (1994) perception of communication as the building block of a CAS.

One definition of CAS rules is as the hypotheses that an agent uses to make judgments about its internal and external environments at any given point in time (Holland 2006). A second description of CAS rules calls them the routines that lubricate an organization's decision making behavior, although this definition would primarily hold in a status quo environment (Grobman 2005). Together the two

concepts help to understand how perceived guidelines aid a CAS agent in its decision-making process.

The interactive relationships that form in a CAS suggest that better decision making happens as agents interact with one another (Koppenjan and Klijn 2004). The specific expertise of individual agents and the broad knowledge that can be gleaned from cooperative relationships (Knight 2002) are both needed. In a stable environment agents may develop expertise in particular areas, other agents recognize that and follow the rule that allows their fellow agents to take charge of their area of specialization.

But agents of a complex adaptive system that is evolving out of a disrupted, dynamic environment will experience rapidly changing rules of behavior. One agent's specialization may turn out to be extraordinarily helpful in the new environment while another must learn new behaviors. Discovering how the rules are changing will be a constant challenge for a CAS (Holland 2006). Agents must always be assessing both the CAS internal environment and environments outside of the CAS boundaries, as well as their own particular schemata to direct their decisions (Anderson 1999) as they find the balance between their traditional way of operating and the new rules that are developing. Rules can fend off entropic pressures as Majchrzak et. al. (2007) point out. Where there is no agreed upon structure entropy will prevail as agents return to their individual preconceived paradigms to guide their decisions.

9. Aggregate action, outcomes, goals. Holland (2006) observes that the aggregate action of CAS agents is something more than the total of its individual parts. The decisions they make and the interactions among them are carried out in order to accomplish some collective outcome (Rhodes et. al 2011). The process of moving

toward the final result takes energy from outside the system and redirects it toward a specific purpose. Nevertheless, while a collective goal is a result of agents coming together to form a complex adaptive system, CAS studies are more concerned with processes and possibilities than with outcomes (Holland 2006). Therefore it is the process of how NGOs interact with each other that is the central focus of this study rather than the disaster work that is the result of that process.

These nine characteristics of complex adaptive systems will provide the CAS framework with which to examine the interactions of NGOs active in disaster. CAS theory has been applied to disaster organizations in the past and much of the CAS literature reviewed here has dealt specifically with disaster settings. However, as noted in the introduction to this paper, the focus of past research has been the overall disaster system, rather than narrowing in on one subset of the system as the current research does. The description that follows is drawn from the disaster literature that uses CAS theory to describe disaster work. It will serve to illustrate how CAS theory is an appropriate framework for describing a disaster response setting which can then be applied specifically to NGOs active in disaster as a subset.

Complex Adaptive Systems and Disasters

The setting of a recent disaster by definition implies a sharp change in the environment that can act as a lever point that catapults organizations and agencies into the middle of the high pressure cauldron that Katoch (2006) described. The disaster transforms the environment in which agencies had been operating and demands that they take in new information, assimilate it and adapt to new conditions (Tierney and Trainor 2003) as rapidly as the situation outside their offices is changing. Seeking the organizational sweet spot, the edge of chaos balancing point between order and chaos,

groups improvise new ways of working (Kendra and Wachtendorf 2007), trying both to use their established routines and to look for appropriate partners to fit their altered roles in the changed environment (Kreps and Bosworth 2007).

As agencies adapt to the different situation a new system of organization emerges out of the initial disaster-caused confusion (Comfort and Kapucu 2006). In her study of the 1988 Pittsburgh oil spill Comfort (1994) observed that the self-organizing that happens among agencies and a disaster-struck community is a “fundamental reallocation of energy...to achieve a larger goal (p. 394).” Together the affected communities and the response agencies strive to subvert the disaster’s entropic push toward disorganization. Community agencies refocus their financial and human resources, that is their sources of energy, on disaster work. When resources are used to manage interactions with each other in order to facilitate disaster work then they will be acting like a CAS and a system with greater organization may result.

In a study following the 2010 earthquake in Haiti, Comfort et. al. (2011) found that earthquake responders experienced pressures both to move toward more organization and to succumb to the dissipating process of entropy. A disaster produces an incredible amount of energy – a flood of money and people flow into the disaster site as if the floodgates of a dam had been opened. Together the agents involved emerge into a response system organized in a way that had not existed prior to the disaster. But with time the force of entropy grows as the energy that brought agents into the disaster work dissipates – money and many of the agents drift back out of the system.

Barraged with new information, an organization must also draw on its own internal culture and mission and the new information to decide if and how to integrate

itself into new alliances (Kreps and Bosworth 2007). It must discern the new rules that are guiding the relationships among agencies. The routines that formerly provided the guidelines used to make organizational decisions (Anderson 1999) may suddenly be impediments to forming new alliances.

Majchrzak et. al. (2007) found that in disaster settings newly formed groups exhibit the cooperation/specialization aspect of systems by carrying out responsibilities about which they feel knowledgeable, and allowing others in the group to provide needed expertise in other areas. Comfort, et al (2011) identified subgroups which they termed “network nodes” of organizations working within the larger “cauldron” of the 2010 Haiti earthquake response that were more closely connected to each other than to the larger system. By working more closely together the nodes were able to carry out their work more efficiently than if they had not formed a subgroup. After the 9/11 attacks on the World Trade Center, groups with specialized knowledge or interest formed sub-groups that worked within the context of the overall response system (Tierney and Trainor 2003). The studies illustrate how each agency’s specialized knowledge led to the overall system developing guidelines for interaction which then guided the organizations’ dealings with each other. The interaction among agencies also shows how the schemata of each agency influences how a system forms and how a system uses agent knowledge to learn how best to fulfill its goals.

The ability of a group of agencies to collectively respond to a disaster assumes a capacity to update information and maintain a constant process of information review, reflection and consequently reshaping actions, in other words to learn and adapt from feedback gained. Kapucu (2006) asserts that not only adequate

information flow but also the quality of communication links can make a difference between a successful disaster response and one that fails.

Comfort et. al. (2011) identified incoming information and the ability to assimilate it into an organization's work as the lifeline of external energy that was needed to fuel a higher level of organization. For example, new information may help an individual agent in the disaster system to decide how to shape their individual contribution, perhaps moving into a new geographic area where there other agencies may not be going, or developing a new specialty. In considering the functioning of NGOs, however, a more adequate conceptualization of information may not be as the energy itself, but rather that of a catalyst that is able to stimulate the use of inflowing money and people that are the actual sources of energy.

Even if information is viewed as a catalyst rather than as the energy source, decreasing it will push toward less organization. Comfort et. al. (2011) report that an inadequate information flow acted as an increase in entropic pressure which prompted agencies to revert back to their original mission rather than remain a part of the disaster responding system. When there are fewer agents, there is less overall knowledge and fewer possibilities for the whole system to learn (Innes and Booher 1999) and work together.

Kapucu (2006) found emergency response coordination to be more a process of responding to incoming feedback than to formally organized coordination efforts. Although self-organization – this redirection of energy that causes a group of disaster responding agents to evolve into an overall disaster response system – may come about without centralized leadership, it is not necessarily an automatic process (Agranoff 2007). Agents need to decide to receive information and then make

choices according to the incoming information. What they do will in turn affect the decisions that other agents make (Comfort and Kapucu 2006); the aggregate of decisions made by each agent may result in better disaster work than if agencies were acting completely on their own, but as they constantly push up to an edge of chaos point, the system can appear jumbled and have the overlapping authority typical of a redundant system. It is easy to understand why some would call for the more easily understood and managed linear models.

When NGOs and coordination are discussed in humanitarian literature, writers often call for improvements in disaster operations management (Helton 2001), usually meaning more centralized administration. Governments and inter-governmental bodies assume that a defined structure will be more efficient, in spite of studies that observe that hierarchical organization inhibits systemic learning (Carbacioglu and Kapucu 2006) and therefore results in less optimal functioning. Much of the research studying disaster work from a CAS perspective demonstrates that in a large scale disaster situation where multilateral and government agencies and private organizations are working side by side a non-hierarchical model more accurately reflects what is actually taking place, although some writers try to find a middle ground, like Kapucu's (2006) call for decentralized operations, but centralized decision-making.

NGOs as Complex Adaptive Systems

As has been shown above, combining a description of complex adaptive systems with what is known about how disaster agencies and organizations carry out their work makes it possible to identify how disaster agencies form complex adaptive systems and to gain insight into how disaster work is implemented. Agents working

in disaster receive an influx of resources which fuel their responses to disasters. They receive information from each other and from sources outside the group of agents doing the disaster work, information such as eyewitness accounts of community members that are asking for help or a government report on where help is most urgent. They make decisions based on the information they are able to collect and their own internal mission. They then carry out work that, when viewed together with the other agents engaged in the same process, make up the larger disaster response.

To explore whether NGOs form a complex adaptive system this study assumes that a system of NGOs can be found nested inside the larger disaster system. Disaster systems do have subsystems as both Comfort et. al. (2011) and Tierney and Trainor (2003), found while studying separate disasters response efforts. Currion and Hedlund (2011) support the contention that NGOs are a subsystem of the larger humanitarian aid work. They also found that NGO self-coordination dealt with matters such as issues of security or how NGOs can respond together to others' attempts to coordinate them, rather than coordination of NGO work patterns themselves. The research carried out here asks if the sub-system of NGOs – if it can be defined as a CAS – engages in self-coordination.

If a complex adaptive system of NGOs engaged in disaster work can be identified it is doubtful that anyone will have designed it. In the language of the U.S. disaster response system there is not likely to be an NGO incident commander directing the work. CAS coordination is subtle and more organic and develops out of the relationships among agents. It is therefore more difficult to recognize than more conventional coordination. By examining the relationships NGO have with one another and how they themselves experience their connections with fellow NGOs it

may be possible to show whether or not NGOs form a complex adaptive system, as well as make observations about how this kind of coordination might work.

Before outlining specifically the questions and methods that will be used to examine NGO relationships and complex adaptive systems, one weakness of CAS theory needs to be acknowledged which may affect the way NGOs experience their interactions with each other and consequently the outcome of this research.

All NGOs Are Not Created Equal

Ironically, while CAS theory seems to give a more holistic perspective of social systems than a linear theory would, its analysis does not seem to take power differentials into account, but rather assumes that agents have equal access to information and communication channels. Studies have found that both INGOs and local NGOs have modified their priorities as a result of conversations among NGOs (Duwe 2001), illustrating the CAS characteristic that all agents learn and adapt their behaviors based on information flow and feedback from other agents. But the intriguing question that CAS theory seems to leave unasked is how agents in a complex adaptive system interact with each other when existing power differentials give them unequal access to information and resources. As Brede and de Vries (2009) observe, group functions of NGOs in coalition are determined in part by the structure of the connections between agents.

Although inter-NGO relationships usually include a genuine desire for a true egalitarian bond, in actuality funding, expertise and information tend to flow from INGOs to local NGOs (Moore, et. al. 2003). In the group of NGOs that are active in disasters outside of the U.S. differing levels of access to funding is a real phenomenon that contributes to a sense of vertical status among them. Many INGOs receive

government or other funding and subsequently channel a portion of the finances, or in some cases all funding except that which is needed to maintain an administrative structure, to local NGOs. Those granting money usually give it with strict guidelines restricting its use. In Duwe's (2001) case study of the NGO coalition, Climate Action Network (CAN), there is an implicit critique that in spite of a CAN mythology of egalitarianism it is difficult to realize equality when some NGOs function as funders for others. Local NGOs and smaller INGOs without the same broad access to funding experience more financial stress (Duwe 2001) causing another layer of difference – the secure, well-funded organization vs. those that are constantly struggling to find the finances to meet programmatic needs and ensure their own survival.

Postma's (1994) study of NGOs in Niger and Mali found that local NGOs felt that INGOs had a monopoly on information, as well as funding. In their study of NGO networks following the Mozambique flood, Moore et. al. (2003) observed that NGOs with more links to other NGOs had the wider beneficiary reach in disaster response. Those organizations were generally INGOs with more resources and natural connections to the external environment outside the Mozambique system of NGOs, (Moore et al 2003) indicating the existence of hierarchy.

Physical location and language ability are other factors that give some NGOs privileged status as compared to others. Comfort et. al. (2011) found that the cluster model, a UN-guided structure to coordinate multifaceted disaster responses, was handicapped from reaching its full potential after the 2010 earthquake in Haiti because its meetings were physically located some distance from Haiti's national government offices and consequently were attended primarily by international agencies. In addition, English was the common language for groups who were able to attend.

Therefore meetings were often conducted in English, further alienating Haiti's non-English speaking earthquake responders. Knowledge of English was also a factor in NGO network coordination in the response to the 2000 floods in Mozambique, with local NGOs often being excluded from coordination meetings because of lack of English knowledge (Moore et al. 2003).

While truly egalitarian systems may be found in groups of simple organisms, they are a rarity in social systems. Power is a constant variable that brings unique twists to the relationships linking individual agents. Given the almost inevitable presence of vertical power dynamics in social systems, this study proceeded with the following caveat: it is assumed that examining the group of NGOs that are active in disaster as a complex adaptive system will yield insights into how a collective system of nongovernmental groups adds value to disaster work. However, at some point any study of relationships among NGOs will need to add a hierarchical overlay to its assessment to gain a more complete perspective of the dynamics of NGO work and coordination.

Implications for NGO Coordination

If NGOs active in disaster do form a complex adaptive system, they and others outside of NGO structures may benefit from using a CAS framework. There is some evidence suggesting that a self-conscious understanding of complex adaptive systems within organizations may lead to improvements in administrative practices. In an experiment which integrated CAS facets into a nonprofit organization administrative model Zimmerman and Hayday (1999) found that board members believed that organizational management was improved when they incorporated into their management practices such CAS characteristics as open communication and less

concern about maintaining consistency. Grobman (2005) suggests that a complex adaptive system framework would encourage increased flows of communication, would facilitate the development of a more egalitarian coordinating model and would allow and even encourage redundancy in work settings.

Given that NGOs are often thought to push back against prescribed efforts at external coordination of their work and are therefore seen as difficult to integrate into the official disaster efforts (Currion and Hedlund 2011), defining their work within a CAS framework may offer suggestions for new perspectives on managing disaster work. If NGOs working in disasters are found to exhibit CAS characteristics there may be ways to take advantage of the system that would enhance coordination among NGOs.

Research Propositions

Understanding how official disaster agencies, multilateral organizations, nongovernmental organizations and affected communities work together at every juncture of disaster work has been enhanced by examining their work and interactions through a complex adaptive systems framework. CAS theory highlights that as agencies and individuals carry out their work, they receive feedback from each other and from the context around them and modify their actions as a result. The aggregate result of decisions and subsequent actions forms a system which can evolve into a structure that carries out disaster work differently than if each individual agent were working independently. Inside the larger disaster system various subsystems can be identified that also form complex adaptive systems. One of those subsystems may be the set of NGOs working in disaster. Although NGOs are often referred to collectively

as the NGO sector, they have not been identified as a distinct complex adaptive system inside of the overall disaster system.

The NGO sector often does not fit smoothly into the disaster work structures of governments and multilateral agencies. They may have been integrated into official disaster work roles, but sometimes they have either been left to coordinate their own work or have insisted on doing so. Taken together NGOs constitute a presence at least as large as that of UN disaster agencies, albeit one that can have dozens, or even hundreds, of individual parts. Such a large number of organizations sometimes overwhelms governments as they try to coordinate them. It appears that NGOs themselves are not sure what coordination means for them. Whether or not NGOs considered together as a group exhibit characteristics of a CAS may carry implications in the way they coordinate work among themselves, as well as for how the rest of the disaster system structures their relationships with NGOs.

This study examined data gathered from interviews with NGO staff to explore whether or not the work of a group of NGOs bound together by little more than their nonprofit structure and a common vision of carrying out disaster related work could be understood by viewing the group as a whole rather than as individual NGOs. It did so by exploring the degree to which NGO interactions among themselves exhibited the nine complex adaptive systems characteristics described above:

1. Boundaries
2. External environment
3. Internal environment
4. Schemata
5. Self-organization/emergence

6. Communication/information
7. Learning/adapting
8. Rules
9. Aggregate action/outcome/goals

The study grouped together only the set of NGOs inside Honduras and therefore the first three characteristics could be assumed and were not specifically investigated. By naming NGOs active in disaster as the set of agents to be examined, the researcher has in effect established boundaries, drawing a circle around one subset of all the entities involved in disaster work and studying them apart from the larger disaster system in Honduras. Creating borders around one subset puts other agents involved in disaster into an external environment outside the boundaries where they will interact with and feed information into the NGO system. The interaction of NGOs included inside the subset will form the internal environment of a system. The study did briefly look into one aspect of the external environment – that of government relations with NGOs since this could be the single largest determiner of how NGOs are able to carry out their work in the country.

Although boundaries, external and internal environments were not the focus of this investigation, the remaining six characteristics of complex adaptive systems were explored in more depth under the following research propositions.

Research Proposition 1 will explore schemata: It is expected that NGO personnel will be able to describe their organization's institutional culture and mission.

It is important to understand that each agent of a system operates out of the base of its particular schema which affects how it responds to the input coming from

both inside the system and from the external environment (Comfort and Kapuchu 2006). Every NGO has institutional dynamics, their culture and mission that will affect how they interact with other NGOs and with the larger disaster work. This research proposition asked NGOs to describe their organization in order to begin to understand how institutional makeup might affect the system as a whole.

Research Proposition 2 will explore self-organization and emergence: It is expected that NGO staff will be able describe new configurations of relationships with other NGOs that have emerged as they carried out disaster work.

New configurations may take forms such as new members joining established coalitions, new coalitions forming, or simply new relationships with previously unknown NGOs.

Communication and information are considered by Comfort (1994) to be a primary building block of complex adaptive systems, while Holland (2006) names rules as the building block. Both are therefore considered essential to demonstrate the formation of complex adaptive systems. The third and fourth research propositions will explore the degree to which communication and information flow among NGOs as they carry out disaster work and whether there are norms which shape their interactions with each other.

Research Proposition 3 will explore communication and information: It is expected that NGO staff will be able to identify both formal and informal channels of communication among NGOs involved in disaster work.

Communication channels may take the formal form of membership in coalitions of NGOs that are working together. It may happen primarily through interactions such as informal coffee house chats. Or it may even be as informal as one

NGO simply observing what other NGOs are doing or where they are working and allowing that knowledge to influence their own work.

Research Proposition 4 will explore rules: It is expected that NGO staff will be able to identify norms that guide how they relate to one another.

Formal coalitions often give NGOs guidance on how they carry out their work. But other norms may be identifiable as well. NGOs may observe unspoken rules that allow them to work only in communities where no other NGO is working. Or they may decide that they will do so only after consulting with the other NGO. Norms may also become apparent as NGO staff members reflect on how they experienced relational expectations in the context of a new disaster.

Learning is another key characteristic of a complex adaptive system. The process of giving and receiving feedback and taking actions based on that information results in the group of agents adapting and evolving. The fifth research proposition will explore the adaptation and learning process.

Research Proposition 5 will explore learning, adaptation and evolution: It is expected that NGO staff will be able to recount how they themselves, or the NGO sector in general, altered their practices while carrying out disaster work.

Evolution and adaptation may take forms such as the widespread implementation of a particular practice. For example, multiple NGOs deciding to adopt a policy of prepositioning disaster relief supplies or beginning to use a particular housing repair technique would be examples of the group of NGOs learning and adapting.

The last characteristic of complex adaptive systems, an aggregate outcome of actions taken, can be observed if NGOs active in disasters are giving each other feedback, and consequently are learning and adapting their work to a collective result.

Research Proposition 6 will explore aggregate outcomes: It is expected that NGO staff will be able to describe the overall results of the work of the group of NGOs.

The sense of competition and the necessity for self-promotion that NGOs experience make it likely that Research Proposition 6 will be difficult to demonstrate as NGOs may find it challenging to report on a collective outcome rather than highlighting their own contribution. However, if NGO staff are able to talk about the results of their own work as a part of a larger disaster project they will likely have experienced the aggregate outcome that a complex adaptive system achieves.

The degree to which the NGOs interviewed experience these six characteristics will determine if the nongovernmental organizations interviewed form a complex adaptive system as they carry out their disaster related work. If a complex adaptive system is found and acknowledged it is likely that enhanced means of cooperation and coordination among the NGOs can be identified and encouraged.

Chapter 3

METHODOLOGY

Research Methods

Qualitative research methods are well-suited both to look for patterns in the way NGOs describe themselves and their relationships with other NGOs and to observe the unpredictable, nonlinear aspects of those relationships. A key strength of qualitative research is the ability to use information gathered through methods such as interviews and documents (Mirriam 2009) to examine how people interpret their own experiences (Berg and Lune 2012). NGOs perform their work and build their relationships from a values-based foundation that can best be explored by eliciting their own interpretations of their work. Whether or not NGOs function together as a complex adaptive system depends in large part on how individual organizations view themselves in relation to the other NGOs. For example, one NGO may observe another organization beginning to work in a particular community. That observation may carry no meaning at all for the first NGO or it may be interpreted as having significance for the work that it is carrying out and influence subsequent decisions.

Because qualitative research methods look at how people interpret their reality they are particularly appropriate to identify complex adaptive systems in a group of NGOs that are working alongside of one another and deciding whether or not the other's action should influence their own. Complex adaptive systems theory describes how the work of a collective of agents achieves more than if each were working individually with no contact with the other agents. Qualitative research methods also

consider individual parts to be more than just a conglomeration of pieces, calling for understanding the object of study as “a complex system that is more than the sum of its parts (Patton 2003 p. 41).”

Qualitative methods generally rely on triangulation, or the use of more than one method of data gathering, to achieve a more complete picture than could be found with one method alone (Berg and Lune 2012). Semi-structured interviews and analysis of NGO publicity web pages were used in this investigation to understand how NGOs in Honduras view themselves in relationship to other NGOs in the Honduran context, how they see other NGOs affecting their own disaster related work and if their self-understanding conforms to the criteria of complex adaptive systems. Each data collection method has strengths and weaknesses; using more than one allows the strengths of one to complement weaknesses another may have. It also gives greater opportunity to test the sets of data for consistency (Patton 2002).

Context is an important consideration in qualitative research (Patton 2003). Patterns are explored in a setting of time and place. The existence of a CAS among NGOs depends on the relationships of NGOs with each other in the Central American setting where they were explored. While these patterns cannot be generalized widely to NGOs operating in other contexts, patterns of relationships that are found can be compared with patterns found in other places (Patton 2003).

The previous experience of the author of this paper as an administrator of NGO programs in Latin America gave a basic understanding of the NGO context in Honduras as a starting point. From 1993 to 1997 he lived in Honduras and has worked with Central America programs for much of the past 20 years. Many NGOs currently working in Honduras were new to him and some had engaged new staff

people, although several long time NGO staff were ready to give their observations and provided valuable contextual background, NGO contact information and in some cases made connections with other NGOs to include in this study.

Honduras, Hazards and NGOs

Although the original proposal for this project was to look at NGOs in more than one Central American country, several reasons led to a decision to focus on organizations working in Honduras. While Central American countries appear similar from a distance and the nongovernmental world in each country has many similarities, the closer one gets the more the differences become apparent. This is particularly true when considering local NGOs as part of the mix of organizations to look at. Time was also a factor, since the amount of time available for gathering data was not as long as originally planned.

Honduras is an ideal choice for research focusing on NGO work in disasters for several reasons. It is a small country, both geographically – slightly larger than Cuba, slightly smaller than Greece (CIA, n.d.) – and in population – approximately 8 million residents (World Bank, 2014). It lies in the middle of the Central American isthmus, a narrow strip of land divided into seven countries that both connects North and South America and separates the Atlantic Ocean from the Pacific Ocean. Central America is vulnerable to a variety of natural hazards. It sits on top of several tectonic plates which form a rib of over 20 active volcanoes along the Pacific Coast, as well as making the region vulnerable to earthquakes. Although Honduras has not suffered the major earthquakes that have hit all of the surrounding countries there are frequent tremors, reminding Hondurans that earthquake risk is real.

Hondurans also experience many weather related hazards. In the approximately seven hours it takes to drive from one ocean to the other a traveler leaves white Caribbean beaches, moves through lush, tropical plains dotted with coconut palms and filled with large banana, pineapple and sugar cane plantations, climbs into mountains where mostly small farmers raise corn, beans and coffee, moves into still higher places, through cool and rainy cloud forests where pine trees proliferate, and finally passes through the scrub brushes and cacti of the arid southern part of the country before ending up on the dark sands of the Pacific shore. Each of these microclimates is vulnerable to a different hazard risk: the rainy tropical north coast plains are frequently flooded after tropical storms and hurricanes; drought is practically a perennial experience in the south; wild fires plague the forested middle part of the country, particularly at the end of the hot five to six month “summer” when little to no rain falls and forest beds are tinder dry; and sparsely forested hills are prone to landslides when rains do begin again (PreventionWeb, 2010). Central America as a whole has a 40 year average of approximately one major hurricane every five years (Pielke, Rubiera, Landsea, Fernandez and Klein 2003).

Many Hondurans have commented to this writer that major hurricanes hit the country about every 20 years, usually mentioning 1974’s Hurricane Fifi and 1998’s Hurricane Mitch. Hurricane Mitch remains a predominant reference point when talking to NGOs about their disaster work. As the 20 year anniversary of Hurricane Mitch draws closer a nervousness can be felt in the conversations. The history of major hurricanes lends seriousness to the disaster response community’s preparedness activities.

Politically and economically Honduras also faces many challenges. From its roots as a Spanish colony to the blatant economic manipulation by banana companies in the early 20th century to being used as a major U.S. military base during the heat of the cold war in the 1980s, to the clothing assembly plants operating free of taxes in fenced off free trade zones in more recent years, Honduran history is thoroughly steeped in external domination (Jackson, 2005). It is the prototype country for the term banana republic.

Throughout the country's history, feuding politicians and political factions left a long trail of governmental instability; in the first 50 years of Honduras' existence as an independent state, heads of state rarely lasted more than six months (Euraque, 1996). In 1982 the country began holding regular democratic elections, with a new president taking office every four years until a 2009 coup interrupted the string of peaceful power transitions. The military coup, which was backed by Congress and the Supreme Court, exposed a deep political fault line among the people of Honduras which the country has struggled to overcome ever since.

Beginning around 2005 the security situation in the country began to deteriorate until by 2011 it was considered the murder capital of the world with a murder rate of more than 80 per 100,000 residents (The Economist, 2013), far higher than the rest of Central America and unimaginable for most U.S. residents where the murder rate is calculated to be around five per 100,000 (CNN staff, 2014). The high rate of killing is usually blamed on factors such as drug cartels and gangs. As the war on drugs in Mexico has put pressure on drug cartels there, they have migrated south, turning Honduras into a transfer station for about 40% of the cocaine that eventually is sold in the U.S. Gangs that often have roots in U.S. jails and began operating in

Honduras after their members were deported back to Honduras are also to blame. Currently gangs maintain a kind of control over many urban neighborhoods where they demand “war taxes” from businesses that operate in their territory and violently retaliate if they are not paid (The Economist, 2013).

For many the high murder rate seems to be only one symptom of a general lack of personal security which impacts how people can live and move about within the country. Five of the sixteen NGOs interviewed for this project had no identifying markings on their office buildings, making it challenging for someone unfamiliar with their locale to find them. Buses are often targets for thieves, and are generally considered an unsafe mode of transportation. Circulating taxis are also not considered safe; there are frequent stories told of taxi drivers in cahoots with criminals who rob their clients. Taxi riders are advised to call radio taxi companies and pay their higher costs or to call a taxi driver of *confianza* who is certain to be trustworthy.

Multiple high end malls and city streets filled with all manner of international fast food chains charging U.S. dollar prices give an almost surreal quality to the Honduran environment when juxtaposed against macroeconomic indicators that point to a much poorer economy than appearances would suggest. The UNDP (2013) ranks Honduras number 118 in the U.N. Human Development Index list, a mid-level standing. Economically it is considered a lower middle income country by the World Bank (2014), with more than 50% of the people living below the poverty level.

Honduras is relatively close to the United States – it is as easy to get to the country from the United States as it is to travel across the U.S. itself. The influence of U.S. culture is strong, from the food that is sold on the streets to the proliferation of

English/Spanish bilingual schools to the Walmart superstores where many people purchase their groceries.

All of these conditions – endemic poverty, a high risk of natural hazards, a government unable to provide basic security for its people, and proximity to the U.S. – make Honduras a prime location for nongovernmental organizations, with their desire to assist people in need. In addition, the small size of the country and the relatively good transportation infrastructure make it feasible to reach most areas of the country.

The government does have a well-crafted law known as the SINAGER law (*Sistema Nacional de Gestión de Riesgos* or National Risk Management System) signed in 2010 which sets up a national emergency management system and gives COPECO legal status as the primary disaster management agency in the country. Throughout its text the SINAGER law integrates NGOs as a part of the national response to disasters. The law defines the national risk management system amply as “the participatory...organic mix of institutions, public and private organizations and the civil society of Honduras (Government of Honduras 2010, p. 5, author’s translation),” thereby incorporating all NGOs, as well as many other private entities, into the system as a whole. In a nod to the role of volunteers that might be involved in disaster work the law states that volunteer organizations – many NGOs field significant numbers of volunteers following a disaster – should play a “complementary” role in the disaster management system, but should not displace paid professionals. The law gives the president the power to name representatives of “organized civil society” as members of the national management system’s oversight committee (Government of Honduras 2010). It gives NGOs a somewhat free hand to make operational decisions by stating explicitly that “for strategic reasons, the aid that

organizations that are members of the system receive directly through national or international cooperation can be channeled directly by them...with the...monitoring of COPECO” (Government of Honduras 2010, p. 15. Author’s translation).” It also charges COPECO with maintaining a registry of all monetary aid or donations received in the country. The law specifically mentions nongovernmental organizations that the president may invite as possible participants of wider discussions on disaster, although it is careful to state that NGOs will not be given voting power in any governmental decision. In general the law seems to recognize the role that nongovernmental organizations play in the national disaster management system and calls for COPECO to monitor them, rather than directing them.

Nevertheless, to the outside observer, many NGOs appear to operate with little government regulation (See the OFDA meeting incident described on p. 114 below) although the Honduran government does do some oversight of the NGO sector in general. During this researcher’s time in the country the national newspaper, *El Heraldo* (2014), reported that the government was cleaning up its NGO rolls and had cancelled the legal incorporation of 4,800 out of more than 12,000 NGOs that were registered in the country. Several people suggested that many of these were front organizations set up with no real day to day operations. No person connected with NGOs that commented on what the government was doing expressed concern – responses typically shrugged it off as a routine action that the government does from time to time. Periodic cleansing of governmental NGO rolls does ensure that any NGO that wants to continue operating legally in the country will submit annual financial and activity reports as required by Honduran law.

Sampling and Methods

The initial data collection goal was to interview a purposeful sample of 12 to 15 nongovernmental organizations. Purposeful sampling “focuses on selecting information-rich [samples] whose study will illuminate the questions under study (Patton 2002, p. 230).” A total of 16 interviews were conducted with a variety of organizations, sufficient to allow a detailed look at how those NGOs view working with each other, as well as providing some hints of how they saw NGOs they were not interacting with. One limitation of a purposeful sample is the inability to make broad generalizations from data analysis. While this sample may not permit the formulation of a broad conclusion, it does begin to identify whether CAS characteristics are found and helps to understand whether or not these particular NGOs together form a CAS. By giving an ample picture of how this group of NGOs conceives themselves in relationship to other NGOs a purposeful sample may also serve to point further research in a particular direction.

Several criteria were used to select NGOs. Total annual organizational budget (as opposed to the annual budget of the country program in the case of INGOs) was used as the first criteria. NGOs were divided into small, mid-sized and large organizations according to the amount of their annual budget: 1) under US\$1 million to \$US10 million, 2) between \$US10 million and \$US100 million; and 3) over \$US100 million. These budget categories vary slightly from those originally proposed (Small: Less than \$1 million; Mid-size: \$1-70 million; and Large: above \$70) but following a more detailed look at current budgets, it was determined that these categories will better serve to classify NGOs into small, mid-size and large

organizations. Six NGOs were selected from the first category, five from each of the other two.

The budget size also served to highlight the local and international divide. All the organizations classified as small were local NGOs, while all the mid-sized and large organizations were INGOs, with home offices in high income countries. (Several of the organizations interviewed were federations with “home” offices located in more than one country, as the well-known example of Oxfam UK and Oxfam US illustrates. In these cases the total federation budget was used to determine the budget size.) For these INGOs, the Honduras office was just one of many such country offices around the world. The size of the overall budget of an organization did not necessarily determine the size of its Honduras program, however. But dividing NGOs by the overall budget of the larger organization does show the very large size variation of NGOs, as well as point out the resource pool that would be quickly available to each institution should a major disaster occur.

The second criterion was to interview NGOs that had worked at some level on disaster work in the past three years. In reality, most organizations viewed disaster work as ongoing, whether that was responding to current smaller scale disasters, carrying out disaster risk reduction activities, or engaging in disaster preparation work. For example, one regional and one national disaster related meeting took place during the time the researcher was in Honduras, meetings which were considered part of the ongoing disaster work that the NGOs were doing. One NGO director commented that disaster work was just one part of his work, but that in the weeks that this researcher was in Honduras he had been working full time on disaster related activity.

The third criterion proposed originally was to select NGOs that had some level of relationship with at least two others in the sample group. The level of interaction found among NGOs was such that this condition was essentially rendered irrelevant as a selection criterion. The web of relationships was strong and reached in some way to all of the NGOs interviewed.

A de facto fourth criterion was office location of the NGOs in consideration. Due to time limitations which prohibited travel to all parts of the country, only NGOs with offices in San Pedro or in Tegucigalpa or whose representatives were able to travel to one of those cities were included as a potential part of the sample. The researcher did interview one mid-sized INGO director from the central part of the country, who happened to be in Tegucigalpa and gave time for an interview to take place in a mall. Repeated attempts to contact two additional NGO directors whose main offices were outside the two major cities were not successful in setting up an interview.

The researcher used three sources to generate a list of NGOs. First he contacted NGO staff who he knew from previous Honduras experience to ask for suggestions of organizations to include in the sample. They highlighted sixteen NGOs to consider. Second, he consulted two web databases. The first was the member list of FOPRIDEH (Federación de Organizaciones No Gubernamentales para el Desarrollo de Honduras or Nongovernmental Federation for Honduras Development), an NGO umbrella organization with 80 members ranging from local NGOs such as a popular culture organization to large INGOs like CARE and World Vision (FOPRIDEH, 2009). The Yellow Pages of Honduras (Páginas Amarillas, 2014) also contains a list

of 135 non-governmental organizations of all stripes which the researcher combed to find NGOs which might be working in disaster.

From these sources a list of 39 potential organizations to interview was developed based on prior knowledge of the NGO or on the organization description provided. The researcher was unable to make contact with 20 of the 39 organizations due to incorrect or unavailable contact information or time considerations. Eventually 16 NGOs responded to set up interview meeting times.

Interviews

Interviews, which Berg and Lune (2012, p 105) call a “conversation with a purpose,” were used to gain knowledge of how NGOs experienced and interpreted their interactions with other NGOs. Interpretations of another’s reality cannot be directly observed, which makes interviewing an apt technique for understanding opinions (Merriam 2009) or relationships or for “entering into another person’s perspective (Patton 2002 p. 341).” Additionally, for this particular study interviewing may have been the best method of collecting data because of the relatively small number of individuals that were included in the sample (Merriam 2009). Semi-structured interviews permitted defining the themes to be covered, but also allowed the freedom to adapt the specific wording of questions to fit the particular context of the NGO being interviewed as well as to adjust questions to the flow of the interview itself (Merriam 2009). Flexibility in specific interview questions was especially important given that NGO personnel came from various cultural contexts (interviews were conducted in both Spanish and English) and from NGOs with a variety of sizes and institutional formality.

It was assumed that NGO country directors and project managers are the people who manage decision making processes that involve other NGOs. Who was interviewed, however, depended on the relevance of the NGO staff person's position to this project and on availability. Interviews ranged in time from 20 minutes to one hour and 15 minutes. Generally, the interviewer tried to keep interview time within 45 – 60 minutes. In several cases where there was a prior relationship between interviewer and interviewee the length of time went beyond the promised hour limit.

The interviews used six broad questions (See Appendix A) to guide interview subjects' reflections on how they view their relationships with other NGOs in the disaster settings in which they implement their programs. With permission from the subjects, interviews were recorded, then translated and transcribed into English. Data analysis was done from English transcripts.

The transcripts were coded using the hypothesis coding method described by Saldaña (2009), which utilizes predetermined codes to examine the data collected. Initially the transcripts were examined for statements that related to the six propositions described above, and a category for government relations. Within those categories the codes were then grouped to find patterns which either supported or denied the complex adaptive systems characteristics. The data coded as relating to schemata permitted an overall description of the NGOs interviewed. The government relations question gave rise to a concept of how the NGOs interviewed related to one area of their external environment.

In addition to interviews, one NGO director invited the researcher to attend two meetings where a number of NGOs along with national and local government personnel were gathered which were designed to share information about disaster

work. The first meeting was a Northern Region event hosted by COPECO which convened about 40 people representing a variety of nongovernmental organizations and others involved in disaster work such as fire fighters and military officials. The second was a national level gathering hosted by US AID's regional OFDA (Office of U.S. Foreign Disaster Assistance) office which appeared designed both to highlight US AID funded projects and to encourage networking across various disaster related entities. As in the first meeting those in attendance represented a variety of entities including a number of larger NGOs, COPECO, firefighters, and the Honduran pedagogical university which was in the process of producing a disaster awareness curriculum for grade school students. These meetings provided valuable background for this study, a chance to observe NGO staff interacting among themselves and with government officials.

Because comparisons of two different forms of communication add depth to the overall research, this study also examined the public statements by NGOs on their web sites. Although describing individuals, Merriam's (2009) observation that there may be inconsistencies between on-line and real personalities also holds true with organizations; comparisons between interviews and web content may either confirm or contradict the other.

The researcher used the NGO web presences to answer five queries that had an impact on how NGOs in Honduras work together. 1) The language of the website was considered significant. Since Honduran NGO staff often spoke only Spanish, whether or not a web page was available in Spanish was significant for cross NGO communication purposes. Conversely, if a web page was available only in Spanish it could limit the contacts that an NGO was able to have outside of the Latin America

context; 2) The “who we are” page was examined to increase knowledge of how the NGOs defined themselves -- their schemata; 3) INGO websites were surveyed for specific Honduras pages which other NGOs could go to for information on that organization’s presence in the country; 4) Throughout the web sites the researcher looked for evidence of collaborative relationships, partnerships or memberships in NGO alliances; and 5) After one interviewee suggested that Facebook is sometimes the best place to get up to date information on NGOs, an opinion that was corroborated by one other interviewee, the researcher also examined the Facebook pages of each NGO interviewed, also with the initial five queries in mind.

Because qualitative research involves extensive interpretation, so much so that the researcher is sometimes referred to as the data collection instrument (Merriam 2009), a member check technique was used to verify the findings of the interviews. It was not possible to translate the entire document, but a summary of findings was sent in Spanish to participants of the interview process (see Appendix D).

Limitations of the Study

Before moving on to present results of the interviews several limitations to this study should be pointed out and kept in mind as results are considered. Complex adaptive systems theory literature reviewed here did not address differing degrees of authority and control among the agents of a system, but rather seemed to assume all agents would be making decisions out of a base of equal access to information. CAS theory identifies that every system has an internal environment but an exploration of the effects of power differentials – exemplified by uneven access to information in the results below – that may be present among the agents in a system will need an additional theoretical approach in order to understand it more completely.

It was recognized at the outset of the project that a CAS perspective is an optimistic lens with which to examine NGOs. Asking NGOs to explain how they work together with questions designed to examine if CAS characteristics exist among them gave them opportunity to describe their perceptions of collaboration and coordination with each other, but did not allow for exploring power dynamics that might exist among them. Consequently the status positions that NGOs may have in relation to one another which possibly influence how they relate to each other were not explored in this study.

Qualitative research allows for delving into the lived experiences of the objects of a study but it does not provide data which can be generalized broadly. The relatively small number of organizations interviewed for this study did not provide a sample large enough to represent all NGOs. In addition, a purposeful sampling method was used to select NGOs to be interviewed, that is the researcher selected a sample group of organizations because they were judged able to give rich insight into the subject of NGOs working together. It was not expected that the data collected would permit inferences of NGOs in general. Therefore it cannot be assumed that all NGOs in Honduras or NGOs in another context will have a similar experience (Berg and Lune 2012).

An additional limitation is the researcher's own experience working with NGOs in Honduras. His previous experience opened doors to talking with nongovernmental organization staff that might have been more difficult to obtain without past knowledge and acquaintances. It is also true, however, that the experience with Honduras in general and with NGOs in Honduras, may have influenced how the data was interpreted.

Chapter 4

INTERVIEW RESULTS

The results of the interviews are summarized below, grouped into the six broad characteristics that were identified in the research propositions – schemata, self-organization and emergence, communications and information, rules, learning and adapting and aggregate response – and a category that began to explore how NGOs relate to their external environment. There are broad patterns and trends that show that NGOs in Honduras have many similarities, but individualities of each organization also show that they do not form a homogenous group. As will be discussed in the following chapter, the overall impression from the interviews is that this group of NGOs active in disaster in Honduras does exhibit some characteristics of a complex adaptive system, although the picture is not a neatly bounded and framed one; some organizations move in and out of the group of NGOs working together while others appear to work much of the time on its fringes .

In the interviews NGOs described a considerable amount of energy spent organizing themselves. There are active informal communication links among them that seem to depend on personal relationships, as well as more formal communication channels. NGOs described altering their ways of working over the last 15 years;

Hurricane Mitch, which occurred in 1998, seemed to motivate more awareness of the advantages of collaboration among NGOs. NGOs found the presence of an aggregate result hard to describe, however, making a description of the NGO collective work together difficult to find. The following sections will examine individually the findings of each research proposition. Chapter 5 will then discuss possible implications of the findings.

Research Proposition 1 – Schemata:

“It is expected that NGO personnel will be able to describe their organization’s institutional culture and mission.”

Complex adaptive systems theory suggests that every individual agent in a system operates out of a base of a particular schema, or the worldview, culture and internal dynamics that affect how an individual entity will respond to the feedback they are receiving. NGOs themselves recognize that the internal dynamics within each organization have an impact on their relationships and the way they approach the broader environment. “...Each NGO has their particular manner in which they construct proposals and all that, they do things deep within the institutions, which is part of the success....,” observed one staff member. Another described each NGO with its own agenda. “We have our own agenda...all our NGOs, my NGO has its own agenda, and sometimes it’s frustrating when you see that our organizations’ agenda doesn’t match the people’s...”

This study briefly explored the schemata of the NGOs interviewed by starting each session asking interviewees to describe their organization. The results show

several categories that can be used to describe the NGOs. The 16 organizations in the sample were project funders and direct implementers, faith based and secular, international and local, very large and very small. All saw their mission as aiding the Honduran people in some way; all were either actively engaged in some aspect of disaster work or had done so in the past, but it was challenging to find patterns that would generalize into categories of NGOs.

The most basic categories of internal NGO make-up were those identified in the sample selection: budget size and whether they were international or local nongovernmental organizations. The size of an organization's budget has a great deal to do with the way it approaches the larger group of NGOs, as does whether the agency is a local NGO or an international NGO. Two of the most well connected local NGOs deliberately described themselves as Honduran organizations, thus distinguishing themselves from those INGOs that have a headquarters office outside of the country. However, the way they described their relationships with other NGOs and subsequent observations in the two meetings, placed them as better connected to the other large NGOs than to local or midsized organizations. One director frequently mentioned "we" when talking about how the large NGOs and his local NGO carry out disaster work together. When asked to define "we" he named several large INGOs and "ourselves," but quickly clarified that "we're not really an international [NGO]." The other four local NGOs made no mention of similar connections with large INGOs.

Related to whether the NGOs interviewed were international is whether personnel that staffed the organization were Honduran citizens or expatriates. Twelve

people interviewed were Hondurans who spoke only Spanish (representing five small local NGOs, four mid-size INGOs and three large INGOs). Three were Americans interviewed in English (representing one local NGO, one mid-sized INGO, and one large INGO), and one was a Honduran interviewed in English (representing a large INGO). Interview language is significant in that it indicates the ease with which a local NGO, or Honduran staff members of an INGO, can communicate with other INGOs and funders outside of Honduras and Latin America.

The most common element found that was not included in the original sample criteria was identification as a Christian faith-based organization. Nine of the 16 NGOs in the sample self-identified in the interview or on their web site as affiliated with the Christian faith. Seven of those nine were connected to a specific Christian denomination. One of the interviewees did not mention a Christian orientation during the interview, but a review of the NGO's website revealed that it was the social arm of a Christian denomination. Another did not mention a Christian underpinning and their web site utilized generic religious language that could be associated with a variety of religions. However, the website mentioned that the NGO was a member of CONSEDEH, the Honduran Council of Evangelical Institutions in Development, suggesting that it considers itself a Christian faith-based organization. Only three of

the 16 organizations interviewed did not identify themselves as faith-based NGOs nor were there any faith based claims on their websites.¹

For all of the NGOs interviewed, disaster related programming is only one of the various thrusts that each engaged in. While all either were currently engaged in disaster or risk reduction programming or had done so in the past, most would consider themselves development agencies that also do disaster related work, describing themselves as carrying out holistic development programs. Three, however, were specialized in fields such as housing or children's education. If an NGO considers its mission to be focused on one core field its internal schema will likely be distinct from an organization that has developed a more holistic mandate.

Another factor affecting the internal dynamics of an organization is the source of its funding. Where funds come from also affects the way they approach other NGOs. Some of the NGOs interviewed depended on a base of small, loyal donors for the majority of their funding; others were more reliant on external grant sources. The seven NGOs interviewed that were associated with Christian denominations had an inherent donor base in their denominations. One NGO, according to its website, relied primarily on child sponsorships for the majority of its funding and another included sponsorship as a donating option. Three of the smaller local NGOs linked to a specific

¹ A review of the larger group of NGOs that were originally considered to be included in this project's sample group showed that 24 of the 39 agencies or 62% were faith-based organizations. While not as high a percentage as the sample group it continues to point toward the strong influence of faith-based organizations among NGOs engaged in disaster and development work in Honduras.

Christian denomination depended heavily on the corresponding denominational INGOs for the majority of their funding. One of them stated explicitly that, “we don’t write projects for other NGOs. Who we write projects to is [only the corresponding denominational INGO].” Whether or not they were connected with a Christian denomination, local NGOs often depended on other INGOs for their funding; several INGOs interviewed were in funding partnerships with local NGOs included in this study.

Midsize and large NGOs, except for those tied to a denomination or which used sponsorship as a funding mechanism, tended to seek grants from larger organizations, governments outside of Honduras, or the United Nations for the bulk of their financial support.

“We just manage and negotiate for funds...and each day it’s more complicated... everything involves negotiating. Negotiating for funds from different donors... the Japanese Embassy, Cooperacion Suiza, USAID...”

These are also the groups that most often mentioned competition as a dynamic among NGOs in general.

“However much we like to say we’re not competitive, I think NGOs are very competitive about who they work with and where they work and what they’re doing.”

“In the end it is a competition and each NGO wants to make their best proposal in order to win.”

“Yes ...we compete with other NGO’s for some funds, but let’s say that it is all within the framework of respect, professionalism, and the capabilities of the NGO’s.”

Other NGOs countered the sense of competition. “I think that [competition] is not felt as much now.... I think there is more openness to say, look I’m doing this... my sponsors are these...I am working in this place, we have this difficulty.”

Internal NGO schemata play a major role in how disaster work is carried out and how preparation for that work is done. While two of the NGOs interviewed described maintaining disaster supplies for the next major event, one NGO employee asserted that “when an emergency happens there are no funds, the project is for this thing and there is none for an emergency,” His organization relied on finding external funding in the moment a disaster occurred.

Whether or not the organizations interviewed engaged in direct program implementation was another characteristic that indicated an internal organizational philosophy. Some INGOs did not carry out their own programs but rather provided financing to others, such as smaller local NGOs or local church committees, to do the actual program implementation.

“As much as possible we do not implement projects,” said one midsize INGO director. Another INGO staff person also said that “in terms of actual disaster responses, we don’t ever implement directly.” And a large INGO stated that “here in Honduras our model is with partners.”

Small NGOs may provide funding to community groups to carry out the work, rather than a more formal NGO. “We work directly with the organization in the community that is organized which is called the Local Emergency Committee.”

But some NGOs stated that they implemented their own programs with their own employees in the communities where they are present.

“We are also implementers...if we secure funds and receive them, we ourselves implement them.”

A small local NGO described implementing a disaster project, “...a proposal was presented to [the funding NGO] and they gave us funds and...we got some estimates and later food was bought in the zone and distributed.”

One of the local NGOs described offices scattered around Honduras which implement a variety of programs that have affected thousands of people. Another local NGO described the agricultural projects that its employees were running. Looking at all the NGOs together it was difficult to find a pattern that determined whether an NGO would fund or implement the programs that they hoped to carry out.

Size of annual budget	Interview Language		Type of program and number of NGOs					
	Sp	Eng	Faith Based	Secular	Implement	Fund	Holistic	Specialized
<\$1 - \$10 million	5	1	6	0	6	2	5	1
\$11 - \$100 million	4	1	3	2	2	5	5	0
\$100 mil - \$1 billion	3	2	4	1	3	4	3	2
Totals	12	4	13	3	11	11	13	3

Table 4.1 Schemata overview

All of the factors which interviewees identified as being important in describing their organizations will likely have an impact on the decisions that they make and how they interact with the larger NGO system. But it does not appear that there are strong relationships among the features. For example, whether or not the staff person interviewed spoke English did not seem related to budget size or if the organization was faith based. NGOs did not identify a cause for the decision to implement programs or to rely on funding others to carry out their programs, other than that the organization had made an internal decision which was not probed by the questions asked here. Perhaps the strongest relationship is that faith based organizations that were affiliated with a specific Christian denomination associated, received less funding from grants and more from small individual donors.

Internal institutional dynamics undoubtedly have an impact on whether or not NGOs were willing to expend resources on collaborative projects or to coordinate with others. The two smallest ones appeared less ready or able to join coalitions than the others. But there did not seem to be any one internal dynamic that could be identified with this research that would push them toward or away from working with other NGOs, as the next section on self-organization and emergence will show.

The following five sections explore to what extent this diverse group of NGOs fit five of the characteristics of a complex adaptive system.

Research Proposition 2 – Self-organization and Emergence:

“It is expected that NGO staff will describe new configurations of relationships with other NGOs that have emerged as they carried out disaster work.”

The non-governmental organization representatives interviewed talked extensively about the links and networks that they had with other NGOs, sometimes describing networks that had been in existence for years, sometimes talking about recently developed connections. Several NGOs were in the process of revitalizing two older networks that had been allowed to wane. A third network, whose primary mission was not disaster related, but that had put all of its energy into disaster work following Hurricane Mitch, had not kept up its legal status in the years following the hurricane, but at least some of its members continued regular informal meetings. Two of the NGOs were not currently involved in any of the disaster related coalitions, but were members of alliances that were not disaster related.

The number of networks that NGOs described showed that the NGO community in general in Honduras is actively engaged in an ongoing process of self-organization. However, this process should be seen as a dynamic ebb and flow depending on the amount of energy that NGOs were directing toward it, as illustrated by the two coalitions that had been active, had been allowed to lapse and were currently being re-organized. One NGO program director stated that working together occurs “to strengthen the organizations that are already there, right, not to form new ones,” indicating that a decision to band together in new ways may encounter resistance. The two smallest NGOs were not members of disaster related coalitions. The representative of the largest NGO interviewed hinted that organizing with other NGOs is not widespread, making statements like, “I have not seen much openness to [working together]. Each organization gets into its own world...,” although this NGO

was as involved as any other in the formal coalitions listed here. In spite of the amount of self-organizing that was happening, the opposing force of entropy pulling away from self-organization could also be seen throughout the interviews.

Before proceeding to a more detailed analysis of the ways NGOs had linked themselves together, though, it will be clarified below that the alliance referred to as partnerships were excluded from this analysis.

Terms Defined

NGO personnel talked about networks, alliances, consortiums and partnerships without defining the terms, sometimes seeming to use them interchangeably. At times however there was a distinction, as, for example, when one NGO director stated that "...the alliances that we have had are with organizations that are part of those networks." When "alliance" was used differently from "network" it seemed to refer most often to a group of two or more NGOs that were working jointly on a project. A network, on the other hand, was generally a larger grouping of NGOs that was formed for information exchange, to provide training for its members or for larger coordination purposes.

The terms partner and partnership are more complicated and deserve an explanation based on this researcher's understanding of the words as he has most often experienced them used within the NGO setting. When non-Honduran INGOs do not carry out their own programs, but rather provide funding for other NGOs to implement work on behalf of both organizations, they often refer to the organizations to which they give funding as "partners." Local NGOs in Latin America are less prone to use

the words partner or partnership to describe their relationships with other NGOs, in part because there is no direct translation of the word partner into Spanish, and in part because the concept of partner does not describe the relationship which they feel with their funders. To illustrate this point a word count of the transcriptions of the interviews conducted for this study revealed that the words partner and partnership or their plurals were used 123 times by the INGOs in this study, or an average of 12.3 times in each interview. By contrast local NGOs used the words only 8 times in their interviews or 2.7 times on average in each interview. They were more apt to talk about their donors or supporters than their partners.

Because the term partner and partnership is so frequently used by one segment of nongovernmental organizations, and so infrequently by another, and because it is generally used rather narrowly to refer to a funding relationship between two NGOs, an effort was made to exclude references to partners or partnership from this broader analysis of how NGOs work together. Although this decision necessarily excludes considering the power imbalances that a funding relationship implies, discussion of partners or partnership was judged to reflect more a feature of the internal environment of an NGO system than a trait useful for the present purposes of identifying the degree to which NGOs constitute a complex adaptive system.

Coalitions, Networks and Alliances

As NGOs actively self-organized themselves into networks they had formalized several of them into non-governmental organizations in their own right. FOPRIDEH (Federation of Non-Governmental Development Organizations) and

ASONOG (Association of Nongovernmental Organizations), both networks composed of a variety of other NGOs, carried out their own programs (one ASONOG program focuses on disaster risk management) that generally are designed to improve and strengthen their members' ability to carry out their mission. FOPRIDEH is the largest formal assembly composed exclusively of NGOs working in development in Honduras with more than 70 members -- nine of the NGOs interviewed in this study were listed as members (FOPRIDEH, 2009). ASONOG, a much smaller network with only 16 members (ASONOG, n.d.), was originally created to bring together NGOs working with refugees on the Guatemalan and Salvadoran borders of Honduras. It seemed to have a national reach currently and was frequently mentioned during interviews focusing on disasters by both ASONOG members and nonmembers. Three NGOs interviewed in this study were ASONOG members.

Almost all NGOs interviewed could list a string of networks, collaborations, and alliances that were active in some aspect of disaster work in which they were either members or knew about or had at one time worked in disaster. Two NGOs, however, stated that they were not part of any disaster related groups. One was part of a coalition that had coordinated housing reconstruction following Hurricane Mitch, but was no longer doing disaster work. The other one stated that "here in Honduras there is no network specifically for disasters or risk reduction."

Contrasting with the experience of that NGO, however, over the course of the other 14 interviews, NGO personnel identified 12 different coalitions or networks that had disaster-related work as all or part of their mandate. Many of the NGOs were

involved in multiple groups. Some of the networks were composed completely of NGOs, some had government involvement. The Red Humanitaria, or Redhum as it was often called, was organized by the UN's Office for the Coordination of Humanitarian Affairs (OCHA) with the goal of being a bridge that connected the principle humanitarian agencies in the region with each other (Red Humanitaria n.d.). While Redhum was mentioned frequently during the interviews and nine of the 16

Name of Coalition or network	Number of large INGOs interviewed that participate	Number of mid-sized INGOs that participate	Number of local NGOs interviewed that participate
FOPRIDEH	4 (M,N,O,P)	2 (I,J)	3 (A, E, F)
Red Humanitaria	4 (M,N,O,P)	2 (I,J)	3 (C,E,F)
Institutional Alliance for Education and Management of Risk	2 (N,P)	2 (I,J)	
Integral Alliance	1 (L)	3 (G,H,K)	
ASONOG	2 (M,O)		1 (F)
Informal alliance	2 (N, P)		1 (E)
ACI		2 (I,K)	
ACT Alliance		1 (G)	1 (F)
Emergency and Risk Management Network	1 (N)		1 (A)
ROCCA		1 (K)	1 (A)
National Committee for Risk Management Advocacy		1 (I)	
Honduran Alliance to Confront Climate Change		1 (I)	
Number of NGOs not associated with a network			2

Table 4.2 Participation in alliances and networks. Letters indicate individual NGOs in order to show the distribution of participation.

organizations interviewed were listed on the Redhum directory, only one NGO interviewed emphasized it as the primary disaster coordinating agency in the country.

Table 2 shows the alliances and networks with some relationship to disaster work that were mentioned during the interviews, the number of INGOs and local NGOs that either self-identified as a member of the group during the interview or that another agency identified as a member. Each letter in the parentheses represents an individual NGO; they are listed individually to be able to show various configurations of participants in each network. It should be noted that this is likely not a complete list. Rather it is the list of networks that were remembered and self-reported by agency representatives during the interviews. A more thorough investigation into coalitions of NGOs in Honduras may well turn up additional networks.

The number of collaborative spaces may be due to an increasing emphasis on working together within the NGOs themselves. Two of the NGO personnel interviewed remarked that they are consciously striving to increase their collaborative work with other organizations. One commented that in the last three years they have been seeking to better organize their relationships with others “because we want to assure that the interventions that are carried out will in the end be ...avoiding duplication of...other actors in the area.” A second INGO representative said that their international headquarters office had been directing the Honduran office to explicitly seek out organizations to work with.

The question explored by this research moved relatively rapidly from asking whether emerging organization could be found – it was obvious that NGOs do

coordinate extensively with one another -- to asking the question of why and how NGOs work together. The following discussion lists reasons that the non-governmental organizations interviewed gave for banding together.

Why NGO Self-Organization Happens

The process of bringing NGOs together to engage in joint efforts appeared to be an organic and disordered one as the many variations of network membership shown in Table 2 illustrates. Various configurations of organizations pop up in different places and for reasons not always clear to an outside observer. The only thing that seemed clear was that nongovernmental organizations do join together in multiple spaces to work jointly on some projects, to coordinate on others, to give each other the benefit of one another's expertise or to give support, with resources or even emotional support. At times the organizing seemed tentative as NGOs' participation may recede or increase and a few of the NGOs appeared to remain on the fringes of the self-organizing. Sometimes the spaces that bring NGOs together include non-NGO entities – a governmental role in coordination was acknowledged by many of the organizations. The prominence of the OCHA sponsored Red Humanitaria points to non-NGO organizing and coordinating. Other instances such as FOPRIDEH, ROCCA, ACI or ASONOG were reserved for non-governmental organizations only.

Many factors led NGOs to engage in coordinated or joint activities or to decide to work alone. Organizational size may have an impact; in the group of NGOs interviewed here, mid-size organizations seemed to express more interest in, or felt more need to coordinate with other NGOs as it was the only group where everyone

emphasized the importance of working together. Representatives of large organizations may not have expressed interest in cooperative work as strongly but they were as likely as any to have multiple network memberships. The feeling was more mixed among local NGOs. One stated that working in coalition was very important to them and named several that he thought were particularly important; their Facebook page confirmed membership in 15 different NGO coalitions, including many, but not all, of the disaster related groups. The size of the Honduras office of INGOs may have affected their work with coalitions. Both the mid-sized and large NGOs that were listed as only members of one network had a small presence in Honduras. Given their limited number of staff it may not have been possible to be more involved in alliances. The smallest of the NGOs interviewed did not name any disaster or climate change coalitions when asked if they were members of NGO networks or coalitions. One large organization was a member of many networks but the NGO representative interviewed stated that “if there are not resources involved, I have not seen that [connections will happen]. Each organization gets into its own world...”

Commenting on that larger NGO, one mid-sized NGO representative illustrated that NGOs have differing perceptions of each other by saying that they were so big they didn’t need to coordinate with the others. As if to confirm the others’ opinion, the larger organization staff person did say that NGOs do “what they have to do, what they’re seeking with their funds, but I don’t think we have come to the moment of sharing, seeing alliances, except in the search for resources,” even though his organization was quite involved in the NGO networks.

NGO personnel described their decisions to coordinate efforts with other NGOs as being based on a pragmatic impulse to maximize the reach, effectiveness and efficiency of the work that NGOs are doing. Below are listed several key factors that pulled NGOs together into forming coalitions which would help to coordinate their work.

Disasters Stimulate Coordination. Hurricane Mitch was a watershed moment for many in the humanitarian aid community in Honduras. “Mitch” as the hurricane is commonly called – bringing to mind the Spanish familiar *tu*, the way Hondurans address a peer they know well, minus titles like *don* or *señora* – was the storm that stalled over the country for several days in late 1998 dumping more than a meter of water, causing an estimated 6,500 deaths and extensive damage throughout the country (NOAA 2009). The hurricane occurred almost 16 years ago, but remained a reference point for many of the people interviewed and was cited as one of the motivating factors in bringing NGOs together. “The year of Mitch, the baptism of fire...completely changed our agenda,” observed one NGO director, “it was a complete disaster of disorganization.”

The disorganization that was felt apparently prompted NGOs to come together in various ways. Several of those interviewed cited Hurricane Mitch as stimulating NGOs to better manage their work together.

“When Mitch happened, those of us in the network, including the network itself presented a proposal to an organization to carry out construction projects and to give attention after Mitch.”

“Internally Mitch gave us the opportunity to begin to think creatively about how to coordinate efforts....The creation of ROCCA...was stimulated by the disaster that all of Central America had in 1998.”

“During Mitch there was more collaboration....We understood the plan better....I think that helped us a lot in understanding that we are collaborators, that we are doing a work with the people that can be complementary.”

Prior to Hurricane Mitch this last person felt that NGOs did not have the same level of relationship as developed during the response to the storm.

The feeling that disasters are a force stimulating coordination was repeated many times over the course of the interviews. If there is a disaster, one NGO representative stated, they know that the coalitions will meet to organize the work of its members.

“In an emergency we are united.”

“We have meetings, like I was saying, to coordinate the NGOs that are in the region.”

Another person described a coalition that sent NGOs into different geographic zones. A third talked about a more informal process where NGOs gathered immediately after an event to decide how to distribute the work. “We all just took a piece of the pie and went out and did the work, you know.”

In addition to the demands of responding to a disaster as a motivator to seek out other NGOs as they approach their work, several also mentioned the role of either local or national government, depending on the scale of the emergency. But with only

one exception they seemed to seek coordination with other NGOs as they approached disaster response work.

Although the literature review highlighted the expense and energy that goes into seeking coordination, most interviewees in this study talked about how much coordination happened, without apparent consideration for the cost of coordination. There were, however, several comments that agreed that time and expense were a barrier to coordinated activities.

“Networks have their value, but coordination always has its problems. The time and priorities of different organizations, and within each organization and funds, determine a lot.”

“We basically spend too much time talking about what should go into relief buckets, you know and this kind of stuff.”

In addition to the time involved in coordination there was one observation that work styles may vary, causing friction among the NGOs. “They do work in ways we would not, for example, building...in an area of risk, an area where we ask – How?...It’s a risky zone. We can’t have the people putting houses here and keep promoting to them that they should improve their lot there.”

Time, energy and different work styles form a barrier to working together as the literature pointed out. But the surprising result of these interviews was that overall NGOs seemed to put a lot of energy into self-organizing without much comment on the cost involved.

Extending Organizational Reach. A second factor bringing nongovernmental organizations together was awareness that no one organization is able to cover all the work. “We can’t do this work alone,” was a common theme.

“Disasters [are] exploding and...their repercussions are overrunning our own capacities.....”

“We don’t have a presence in the whole country, but other NGOs have a presence in municipalities where we don’t go.”

“Sometimes there is a disaster in a region where we had never done anything before....”

“It is not a work that we can do ourselves alone.”

“There are never enough resources.”

NGOs recognized that through membership in networks they may be able to have broader influence. “In my case,” said an NGO director, “this allows us to have a lot of relationship with the press....The fact of being in this network allows us to get access to other levels.” In one instance an INGO had placed several of their employees under the administration of a local NGO allowing the INGO to engage in programmatic activities that were not part of own programs.

Several organizations described storing material resources ready to respond to the next disaster. Material resources seemed to be commonly shared among NGOs, implying that no one NGO had the organizational reach to distribute all the supplies needed following a disaster. One NGO which maintained warehouses on both sides of a major river in case the bridge was affected said that they distribute the disaster

response supplies through other organizations with which they have relationships. On the other side, the NGO representative quoted above, saying “we don’t share,” shows that not all of the organizations shared their resources equally with one another.

Additionally NGOs sought to extend their programmatic reach by seeking specialists among the other NGOs that they themselves lacked. “Everyone has their expertise, right?” commented one NGO program director, going on to cite an example of an NGO that had done extensive work on river dikes that was widely recognized for their experience. Others agreed that working together allowed them to cover weak spots in their knowledge or experience base.

“We can contact organizations who...maybe we don’t know them, but we know what they are doing and try to develop a relationship with them.”

“We know NGOs that are specialists...We can seek them out if there is need...”

Cooperation Is Good. Several interviewees hinted that there was a push for increased cooperation because it was currently considered a better way to work. One NGO commented that an individualistic approach is no longer viable in the NGO world. “I think that all the NGOs are used to doing work with others. I don’t think there is any NGO that is an island, but rather they join forces....Now not so much can be done if one is individualistic.”

The emphases of INGOs’ headquarters offices also seem to show NGOs in Honduras that alliances are something that should be sought out. Two organizations reported institutional goals of increasing the number of their alliances. Three

members of one of the more informal alliances in Honduras came together in the country because they were part of INGOs whose headquarters offices formed an alliance. They then invited a representative from a fourth INGO to meet with them. Another INGO staff person not involved in this coalition explained that some negotiation among organizations happens in the headquarters office outside of Honduras, “at a strategic level,” to assist NGOs in deciding how to coordinate their work in Honduras.

One of the smallest organizations, however, simply could not think of disaster related NGO coalitions that they were a part of. Another was a member of one coalition, but it was a group of church related NGOs with no disaster involvement.

Advocacy. Perhaps the most consistent mention of collaboration came from organizations that engaged in some kind of policy advocacy work. There was a widespread opinion that effective advocacy for whatever cause could only be done if NGOs banded together. Advocacy work, said an NGO staff person is “a meeting point with the other networks.” One of the coalitions mentioned by NGOs was a “space that ...does public policy advocacy linked...to risk management.” The interviewee who mentioned this network said that it was composed of 170 members which would make it the largest coalition found in this research. Another organizational representative said that her NGO bands together with others to get local governments to assist housing projects.

Emotional Support. Several interviewees talked about the emotional support that they receive from networks and alliances. NGO staff talked about drawing on

each other when they needed support. This seemed to happen at various levels. An NGO director described meeting informally with other directors to talk about a variety of work matters. And one staff person called one alliance that she was part of "...a very safe space to discuss honestly what's going on, the challenges in their work...they actually support each other emotionally, I would say."

There were others, however, who did not mention this reason for coming together. One overtly emphasized that organizational relationships were only made up of formal agreements – "everything is written in the contract," thereby deemphasizing any personal support element that coalitions might provide.

Funder Formed Networks. Funding agencies may see advantages for their fund recipients to join together in a coalition. Two of the INGOs interviewed described networks that they had founded that were made up of other NGOs that received their funds. ROCCA, one of the networks formed after Hurricane Mitch which currently stimulates climate change adaptation work among its members, is an example of a funder started network. The OFDA meeting that this researcher attended during his time in Honduras was perhaps not designed to set up a formal network, but it seemed intended to offer networking opportunities to those attending, in addition to highlighting OFDA funded projects. Not all attendees were OFDA aid recipients, all had plenty of time for informal interactions during an extended break and the lunch served after meeting. According to another INGO with Canadian connections, the Canadian government also periodically calls together the organizations that it funds for similar meetings.

Funding. The final motivation found for NGOs to self-organize was funding. The ongoing process of finding funds plays a complicated role in the NGO world. It acts both as a source of competition, which may be an obstacle to collaboration, as well as a factor which encourages active collaboration. The larger and better connected NGOs talked about coming together frequently to write joint project proposals to an outside funder. Smaller NGOs did not describe participating in this kind of collaboration.

NGOs described several processes for jointly receiving one grant. First, someone may hear about an invitation to write a project proposal and call together several other NGOs which will complement their own areas of expertise or geographic reach. Another process might begin with organizations outside of Honduras. INGO headquarters offices may join together to write a grant proposal for their Honduras offices. Or there may be outside agencies that act as middlemen between NGOs and funders who approach NGOs in Honduras, ask them to join together and then write the grant proposal for them. When funding has successfully been procured the NGOs become a coalition for the life of the project, after which they no longer maintain the alliance and it ceases to exist.

Joint NGO grant writing was important enough that one NGO disaster programs administrator said that his primary motivation for seeking out other organizations was to do fundraising together. Another thought that the *only* way that NGOs coordinate with each other was when there were financial resources involved. “If there are not resources involved, I have not seen that there will be much openness”

to working together. Those NGOs affiliated with a particular Christian denomination were less likely to express this motivation for working cooperatively.

Funding as a motivation for joining forces was not a factor found in the literature reviewed for this project and therefore was an unexpected finding of this study. But funding as a source of competition was highlighted in the literature and was confirmed by some interviewees who described the search for funds as a primary source of competition between NGOs. As such it represented a potential wedge between them, an illustration that entropic pressures also push against the urge to self-organize within the NGO sector. The process of looking for funds “has become super competitive,” according to one NGO director. “In the end,” said a project director from another NGO, “it’s a competition and each NGO wants to make their best proposal in order to win.” A third NGO staff person gave a shoulder shrug type of response when talking about the competition for funds. “We’ve applied for these slow disasters, disaster risk reduction stuff, but [another NGO] typically wins in Honduras. The last two RFPs (request for procurement) we did not win.” He blamed their losing the fund raising contest on being a rural focused NGO while funding priorities were shifting to urban.

Funding then, played both ends of a collaboration/competition continuum. Which side an NGO finds itself on depended on which grant proposal it was trying to secure. Adding an additional bit of confusion, once an NGO wins a grant for itself, it may once again need to become a collaborator with its competitors if the funder wishes it to be a part of a funder-formed network, illustrated by the OFDA forum

described above. In the case of one grant which was awarded by OFDA, both the winning and losing bidders were present at the meeting.

Online Comments on Self-Organizing. In addition to asking each interviewee about their experiences in forming coalitions and working with other NGOs, the researcher examined each NGOs' internet presence to determine to what extent the collaboration mentioned in the interviews was mirrored in NGO public statements. Particularly for INGOs this is an interesting exercise because web sites are not necessarily maintained by the Honduran branch of the organization and can give an indication of larger organizational views about working jointly. A collaborative emphasis is more viable if the headquarters offices highlight alliances and networks in their overall publicity.

Size of annual budget	Web mention of alliances	No mention of alliances
Small \$1 – \$10 million 6 Local NGOs	2	4
Mid-size \$10 – \$100 million 5 INGOs	4	1
Large \$100 million to \$1 billion 5 INGOs	3	2

Table 4.3 Website mention of alliances

The study survey showed mixed results although it tilted slightly in favor of alliances. While local NGOs tended not to mention alliances, the two that did showed that they placed significant priority on alliances. One listed nine alliances or networks to which they belonged, the other 12. One noted in their Facebook page that they had received a national award for founding various networks.

Mid-size and large NGOs did tend to refer to alliances in their websites as one of the ways that they carried out their work, though they were sometimes quite specific about the function of their alliances. One organization only described collaborating in the context of advocacy; another only in the context of disaster work. It was sometimes difficult to determine if mention of working jointly with other NGOs was referring to collaborative work among equals or if they were referring to “partner” NGOs that they were funding. Several of those that did highlight their cooperative work had links to their fellow NGOs on their sites.

Nine of the 16 NGOs interviewed made reference on their web site to some kind of work in alliance with other NGOs, suggesting that they viewed collaborative work as a significant means of carrying out their work.

The groups, coalitions and networks that NGOs formed, along with a smattering of evidence of some alliances on their web sites, signaled that in Honduras NGOs engaged in good deal of self-organizing for a variety of reasons. Many expressed an underlying attitude that working together was important and necessary. At times there was so much self-organizing activity that it appeared as just another layer of disorganization. The seven reasons found which pulled NGOs into self-organizing activity seemed to have fairly strong motivating power.

However, an entropic push away from more organization was also evident. The fact that the smallest organizations were also the least connected with others suggests that access to resources may be a significant factor in NGO organization activity. If resources are the energy needed to overcome entropy, then the smaller

organizations may not have had what was needed to engage in organizing activity with others outside of their organizations, whether they want to or not. As suggested by previous studies (Gilman 2010) competition also seemed to be a force pulling NGOs away from one another. The two alliances that were being reactivated shows that sustaining networks requires a consistent flow of energy to maintain a higher level of organization once it has been achieved. If that energy dissipates, for example, in the case of ROCCA, after the urgency of the Hurricane Mitch response had passed, the force of entropy may allow the spurt of self-organization stimulated by a disaster to lapse.

The opposing forces pulling both toward and away from self-organization were evident among NGOs in Honduras. At the time of the interviews many of them were putting significant priority into various means of coordination and collaboration. However, the pull away from increased organization was also apparent, showing that self-organization does not happen automatically or consistently, but rather requires a steady supply of energy in order to sustain it.

Research Proposition 3 – Communication and Information:

“It is expected that NGO staff will be able to identify both formal and informal channels of communication among NGOs involved in disaster work.”

The picture of information and communication flows that emerged through the interviews was one of active informal and formal channels that leaned heavily on personal relationships to keep information streams moving. Rank within NGOs appeared to play a role. Informal communication in particular seemed to flow through

organizational peer lines – directors talked to directors; others related to staff at their peer level. The size of the Honduran branch of the INGOs seemed to have some influence on communication flow, but except for the two smallest organizations, did not consistently affect which NGO had access to communication with other NGOs. Formal reports, informal conversations, and simple observation all seemed to be active channels of information flow. Email was a significant communication channel, but other internet forums, such as websites or Facebook pages, were not found to be a substantial means of communication among the NGOs interviewed.

Personal relationships seemed to liberally lubricate the flow of communication among NGOs, contributing to the feeling that one interviewee expressed that things are “less formal here in Honduras.”

Over the course of the interviews it became clear that most people interviewed knew the majority of other NGO staff connected with disaster work.

“We all know each other,”

“We have had many years of working together.”

“The director here...has been here 18 years and she has contact with the members of other groups.”

“We know who is who. When someone leaves an NGO and someone new comes in there’s always discussion about where this person is from because they’re not from here. But everyone knows....”

Knowing each other well was credited by many for aiding communication among them. After recounting the story of a cooperative food distribution venture, an

NGO director stated bluntly that it got started because of “relationships.” He went on to talk about a relatively informal group formed recently by 12-14 of the directors of the larger NGO in Honduras to increase contact among them. (The existence of this network was not confirmed in any of the other interviews.)

Other comments reinforced the idea that informal connections provided a channel of communication about the work that NGOs were carrying out.

“I have a lot of friends that work with NGOs, and you know, a lot of the networking just happens through social engagements.”

“So I have my relationships and I have the people I can talk with – ‘Hey, what’s going on...in this area? I’ve been hearing this and this,’ and I can check it out that way.”

“During a response to an emergency it’s a little more complicated, but almost always there can be a few minutes to sit down and share with each other, share progress reports with each other.”

The significance of informal personal relationships for enhancing communication, however, was not shared by all. One person simply answered, “No” to the question of whether informal relationships existed among NGOs. Later, however, she seemed to recant the “no” answer, by saying that, “one goes and starts to talk about the projects, right, because one does have a social life with [other NGO staff], but we look at the work that each one has so we know a little more...and we know a little about the work that they are doing.”

The two meetings of organizations and agencies involved in disaster which the researcher was able to attend confirmed an active system of informal communication flow facilitated by the relational links. Animated conversation during breaks and lunch times at both meetings buzzed loud and long. While the meetings were attended by NGOs and government connected agencies such as the firefighters' brigades, there appeared to be natural clustering. NGO personnel tended to group around other NGO staff; government agency personnel by and large related to other government employees. After the OFDA meeting two directors of NGOs interviewed for this study removed themselves to the hotel's elevator lobby where they engaged in a long, private conversation.

NGO personnel interviewed made many references to more formal information sharing venues: "spaces," "*mesas*" (literally tables, roughly translated as committees or commissions), alliances and coalition meetings. Informal communication flows sometimes developed from formal spaces just as formal contacts evolved into the ongoing relational links that facilitate information flows.

"In the interactions we have with the other organizations we realize how it is going, we ask them how it went, we ask them if they have experience in X theme, what results they have."

"...These spaces for working on...risk reduction...allow you to meet the people from other institutions. So there you're making a certain loop of knowledge on a professional level."

“In the meetings you get to know the NGOs and the organizations in this area. But it’s mainly during the meetings when you run into each other or one person comments on something and another person comments on another thing. But I think it’s a very nice relationship.”

In addition to person to person communication, formally established coalitions played a role in information channels. Sometimes alliances were thought to develop through more social relationships. “Many of the alliances happen because of that, through the friendships – of course also because of the interests of the institutional character.” Alliances and networks have meetings with agendas that serve to keep their members in the know about what is happening in the disaster and risk reduction area. “We have focused meetings of the humanitarian network to deal with some topic, review an annual work plan...”

Formal networks usually have appointed facilitators that communicate the network’s agenda; network coordination rotates from organization to organization. During the interviews for this study at least three NGOs spoke of currently holding the presidency of a coalition that they were part of.

When there is a cooperative funding agreement, either when one NGO funds a partner organization, or when several NGOs have banded together to write a joint grant proposal, there are formal channels of communication which are delineated in formal contracts or memos of understanding. In these cases regular reports are used to pass information from one to another.

Sometimes NGO representatives did not seem to be able to articulate how information passes among them; they just knew that they knew. One staff person, when asked how information flows from one NGO to another responded that once an NGO is part of a network, “everything is known.” Implicit in her statement is the idea that NGOs watch one another and make judgments as they observe. Observation is an important channel with which to receive information.

“[We] look at which... organizations are in the community....”

“On the local level we see the organizations that are involved in the area where we are working.”

NGO directors played a significant role in the flow of information among NGOs, both serving as a main communication pipeline and the filter through which the rest of the organization received its information. Most agency to agency interactions seemed to be carried out by the director, according to the staff people that were interviewed.

“Really most of that agency to agency stuff comes from [the director]. He’s ...the key.”

“There are some other organizations that also have more contact with the director...”

“There is the level of communication that is more official that has to be done with our director.”

The directors themselves who were interviewed did not usually comment on the significance of their role as communication facilitators, although one did mention

that he mainly attended network meeting that he thought were “fundamental to our organization.” Another director acknowledged the importance of director relationships. “We get together pretty frequently and talk about all the stuff that’s happening in the country.”

The heavy information flow that most NGOs appeared to experience was not consistent among all NGOs. The two smallest local NGOs remained largely outside of the loop of networks and alliances that other NGOs talked about. They were more apt to mention government related alliances than their fellow NGOs when asked about communication and coordination. One of them barely mentioned other NGOs at all during the entire interview in spite of being repeatedly prompted about contact with fellow nongovernmental organizations. The lack of NGO connection was confirmed in the regional coordination meeting with COPECO. While most NGO staff present had vibrant conversations with each other, the three attendees from this particular NGO were not observed interacting at all with other NGO employees. Both of these smaller less connected organizations were affiliated with a specific Christian denomination and closely connected to the larger INGO also affiliated with their respective denominations. They depended on the INGO for their financial support; it is conceivable that they also depended on that INGO for their connections to the larger NGO community.

The larger INGOs seemed well connected with each other, but the connections of the midsize organizations were inconsistent. Two seemed very well connected to the larger network structures, while three were more marginally linked.

Overall the study found that a rich web of communication channels linked together the NGOs in this sample group with information exchange happening in forums ranging from formal meetings with agendas to simple observations of what others are doing. The level of connectedness, however, was inconsistent, with some NGOs much better connected than others to the other NGOs around them.

Communication Online. Part of this study included examining NGO websites to explore how the internet might be used to facilitate communication among NGOs. During the first interview conducted for this project, the interviewee stated that the most up to date information on NGOs in Honduras might be found on Facebook. Ultimately, it was found that Facebook is used inconsistently among the NGOs interviewed.

The most common medium for formal communication was email, although one person observed that it can be a challenge to get people to respond to emails. Skype was mentioned several times as a communication medium, but seemed to be used primarily for internal organizational use, or when formal networks were spread over the country or had members outside of Honduras. Most organizations maintained some type of Facebook page, but its use as a communication tool among organizations was cited mainly by people who already had comfortable, informal relationships with one another. After email, cell phone seemed to be the most common medium for immediate communication. Culture may make a difference, as well, in how people communicate. One expatriate observed that communication with foreigners is more apt to be by email, but with Hondurans it is more common to make phone calls.

Another Honduran NGO director said, “If it’s the first time, I try to contact by email..., but then I love to use the phone.”

Modern communications technology has made a difference in how connected NGOs feel with each other. “In reality, the isolation hardly exists now, with the regular communications on the internet,” commented an NGO director. When their work in one geographic area of Honduras began, he said, there was practically no communication with people and staff there. Now it is more common than not for people to have cell phones.

A survey of the web sites of the sample group of NGOs revealed inconsistencies in how the internet was used and the web site maintained. The first query when opening a web site was if the site was maintained in Spanish, English or both, since the language used says a great deal about who the web site is intending to communicate with. Of the six small local NGOs, two were only in Spanish, three were bilingual and one was only in English and obviously intended primarily to reach a North American donor audience. As NGOs got larger they tended to maintain a web presence primarily in English. Four of the mid-size NGOs had English-only websites, the Spanish only site was from an NGO based in Europe. Three of the large NGOs’ web sites were only in English, although one of those had a separate Honduras chapter web site which was exclusively in Spanish. Two of the large INGOs maintained a completely bilingual site.

About half of the NGOs maintained a web site only in English, meaning that the NGOs interviewed did not intend their web sites to be used as a means of

information exchange in Honduras, since a majority of their own staff does not speak English, not to mention the staff of other NGOs. Instead they were primarily using their web sites for external communication. Judging the by number of “donate here” buttons, INGO web sites seemed to be viewed as fundraising, rather than communication tools.

One of the large INGOs did not make mention of their small Honduras program anywhere on their site. This was largely true of the organizational Facebook sites as well -- eight of the nine mid-sized and large INGOs did not have a country specific Facebook page. Three of the small NGOs used only English in their Facebook page. Since only two organizations had a country program specific Facebook page in Spanish, Facebook is clearly not a tool that these NGOs used at an organizational level for communicating among themselves.

Websites and Facebook pages did not form a major piece of the otherwise strong communication links among NGOs. That websites, which are generally less personal, are not used for internal communication seemed consistent with the relationship dependent, informality of much of the communication found among NGOs. However, this dependency on more informal means of communication suggests that information is delivered inconsistently among them. Some NGOs are well-connected, others less so.

Research Proposition 4 – Rules:

“It is expected that NGO staff will be able to identify norms that guide how they relate to one another.”

Rules were defined for this study as guidelines that helped NGOs know what was expected of them in their relationship with other NGOs. Most NGOs' employees interviewed seemed quite aware of the norms that guided their relationships with one another, whether they were written or unwritten. There was a strong expectation that NGOs seek out opportunities to coordinate and work together, carry out their work as efficiently as possible, and behave in a way that engendered trust with one another. If funds were involved they wrote formal agreements. Many encouraged following internationally developed standards of disaster and humanitarian work. The expectations identified allowed NGO staff to know how to relate to one another in commonly understood ways.

Perhaps the most notable change in norms that NGOs remarked on is that in recent years they have developed an environment that expects coordination and joint work.

“Now we can demand a little more coordination.”

“In Honduras...working jointly among NGOs in the last few years has been strengthened a lot. I could say in the last 9 years.”

“In the past [we were] too individualistic, like we developed the programs and we work in the programs.”

“I don't think there is any NGO that is an island....now not so much can be done, if one is individualistic.”

In addition to the growing expectation that they coordinate their work, NGO representatives identified other expectations that guide their interactions with each other.

Dividing Responsibilities and Territories. Coordinating work does not necessarily mean NGOs taking on joint projects; it may mean dividing tasks among themselves. Over and over again NGO staff described a kind of geographic coordination of disaster work. When a disaster happens, “we come together almost immediately. All of us, we sort of decide who’s going to do what in what part of the country, depending where the storm or the damage has been done.”

NGOs described honoring the territories of others. “We know which NGO’s are in each area and who we can work with,” and if they see that another NGO is already at work in a community they decide not to enter that area.

“If we arrive and we realize that there is already an organization there, we don’t go in. And the same goes for them.”

“We don’t want to be crawling over each other. And we’ll say, ‘Okay we’ll take Northern Comayagua and you take, uh, you know...Lempira.’”

“Everyone covers their zone in a coordinated way. And if they say we don’t have anything for this place, we need you, then there we go.”

When NGOs do not follow the rules for dividing the work it gets noticed. One NGO representative complained about another one (not interviewed for this project) that had set up projects in an area that a third NGO usually covered.

NGOs divide up work, not just by geography, but also according to their programmatic expertise. One person described starting to work in a community in which another organization had been present. “That region is theirs,” she said. But the first NGO was working with water and sanitation and the second had experience improving school infrastructure and began working in the community even though another one was already there.

“If they are serving in the community in a certain way and we can serve in another way...then we can both be in the community.”

“Each NGO has its strengths and its capabilities...that it is good at.”

The divisions of labor are sometimes done formally as when COPECO or a formal coalition like the Red Humanitaria is involved in coordinating a disaster response. But divvying out responsibilities may also be done more informally. “I’m talking more about something understood or agreed upon, not something written,” said an interviewee when describing the decision to enter a community where another NGO is present. Another described it as “a bit of a game...you know, it’s like a group project in schools, you have to figure out how to equally distribute the work.”

Efficiency. The expectation that NGOs divide up their work was driven by a growing requirement that NGOs work as efficiently as possible.

“Every day resources have to be used more efficiently and be able to complement each other...instead of doing the same thing in the same places.”

“When there is an emergency and a certain organization is in that region, we coordinate with them so that we don’t have to travel all the way there.”

“...Do a particular work in a specific area with internal specific responsibilities that each one has to do as much as it can within its experience reference.”

“...To really guarantee that the people that we are going to...give help, receive with dignity...what they have to receive.”

The expectation that efficiency will be maximized extends to building on or complimenting another NGO's work. One organization described using community committees that had been formed by another NGO. Another organization said it shares resources such as vehicles or storage infrastructure or response supplies.

But working efficiently with others may mean a price of less efficiency within one's own organization which detracts from following the norm of gaining overall efficiency. “People are so busy with the demands of their own organization....I don't think people can keep up with the work they have to do for their own organizations so I would say that any coordination efforts probably take second priority.”

Trust and Transparency. The highly relational dynamic of the NGO environment in Honduras requires a high degree of trust among them. Coordination happens most naturally when the organizations trust one another. NGOs generally use common language and often understand the values that each holds. But they also expect each other to be transparent about expectations that they do have. One NGO staff person stated that her highest expectations revolved around open information sharing.

“I think it's better to make sure everyone is on the same page...before you start implementing something.”

“I think that one [expectation] is to be transparent...and set things out clearly from the beginning.”

“I think a perfect relationship with an NGO is based upon clear communication and understanding and setting clear objectives...so that they have their role clearly spelled out...and we’re able to talk about it honestly.”

Complete trust, however, is an elusive goal and some reservations about trusting the others were expressed. One mid-sized NGO felt that one of the larger NGOs was “so big that they do not coordinate with anyone.” In the interview with the larger NGO, however, its representative expressed the same desire as other NGOs to coordinate their work.

NGOs are often motivated by a set of values and philosophical or value congruency was important in developing the kind of trust that they expect of each other. One NGO looked for organizations to collaborate with that have similar values. Another person expressed that there was no problem with “following what the other organization...wants to do...if they’re doing it the way we do it, or if it doesn’t go against my belief or the way we work with people.”

Standards. Responding as a group to critiques that they provide inconsistent services, NGOs worldwide have set up operational standards. In Honduras, several NGOs mentioned that they expect to carry out their disaster work according to established international standards. *The Humanitarian Charter and Minimum Standards in Disaster Response* put out by the Sphere Project (2011), a global coalition of NGOs, was mentioned as articulating standards which Honduran NGOs

should follow. Two organizations were attempting to become certified by the Humanitarian Accountability Partnership, another global coalition of humanitarian organizations whose goal it is to ensure greater financial accountability to those being helped. While following these exterior standards was a self-imposed attempt by some NGOs to ensure a minimum quality of services, there did not appear to be a general commitment from a majority of NGOs to do so.

Formal Rules. In addition to informal expectations, it was also widely recognized that formal interactions needed to follow prescribed norms. Networks and alliances have structures that NGOs rely on to ensure their functioning. When they were part of established networks NGO personnel were aware of whose responsibility it was to call meetings and set the agendas.

Networks may be well established but it was not assumed that all networks would become legal entities. One network had let its legal status lapse, although many of its members continued meeting because they found it helpful. Another network was debating whether or not they wanted to set up the administrative structure necessary for achieving legal status.

Every formal alliance or joint project taken on by several NGOs developed formal expectations. Letters of intent, memos of understanding and contracts were used whenever joint financing was involved. Formal written agreements seemed designed to fulfill a functional need of ensuring that they were carried out. “If there isn’t anything written and approved by the different boards, nothing gets done.”

Don't Abuse NGO Privileges. The newspaper reports about a government shutdown of thousands of NGOs highlighted the expectation that NGOs take care with privileges of operating in the country. NGO personnel recognized that the NGO model has frequently been abused; many “portfolio organizations,” hollow agencies had been set up to benefit in some way or other the people who founded them, leading the government to be cautious with all NGOs. Organizations are careful to “take good care of the prestige of the [organization]. We're very, very careful of who we're helping.”

Consistent with CAS characteristics, interviews showed that NGOs have developed both formal and informal expectations of each other as they carry out their work which give some guidance for developing their relationships. No one NGO is the recognized leader; no one NGO has rule enforcing authority, meaning that the norms carry different weight within different organizations. But according to this group of interviewees, the norms mentioned here are generally expected of NGOs and mostly followed.

Research Proposition 5 – Learning, Adaptation and Evolution:

“It is expected that NGO staff will be able to recount how they themselves, or the NGO sector in general, altered their practices while carrying out disaster work.”

Looking at the overall trajectory of NGOs working together it seems clear that the entire system of NGOs has evolved, putting more emphasis on cooperating with each other in recent years. An overall emphasis on climate change was mentioned by some. But NGO personnel cited few other themes that illustrated an evolving system.

Again, the adaptation that has happened is not consistent, some felt that the group of NGOs had learned and adapted more than others believed had happened. One person could not think of any way in which NGOs had learned together. They lamented not having more overt opportunities to learn together. They recognized that conditions and knowledge constantly evolves, that there is a need to stay up to date with new trends and methods of working, and that they will continue adapting. “We will not stay either strategically or conceptually in the same place,” said one person.

The frequent references to Hurricane Mitch response and recovery work were the most obvious sign that NGOs recognized that the NGO community is learning and adapting as a system. NGO responses to Hurricane Mitch had become the baseline against which current work is still measured.

“When Mitch happened...”

“Mitch (again) gave us the opportunity to begin to think creatively...”

“Hurricane Mitch forced the organizations....”

As is clear from the discussions of the research propositions above, most NGOs interviewed talked about collaborative work and membership in alliances and networks becoming increasingly important over the past decade, illustrating that they have come to believe that networking is an improved way of working.

“During Mitch there was more collaboration...I think it helped us a lot in understanding that we are collaborators, that we are doing a work...that can be complimented.”

“Now you have to join together. That is one of the things that has changed.”

“But I remember that about eight years ago we started with the alliance themes. Generate alliances. How many new alliances do we have?”

Planning and carrying out learning experiences, itself, is a perennial NGO occupation; many interviewees talked about giving, hosting, and being a participant in workshops and seminars. Workshops are places where knowledge is exchanged among NGOs.

“Sometimes their experiences are better than our experiences, and sometimes our experience in that area is really good.”

“Recently [another NGO] developed a workshop on climate change and adaptation, something that they are very good at. They have good materials.... We attended the workshop and it was very good and we had a lot of sharing about the experiences we have had.”

The fact that many workshops are held is not necessarily evidence that the NGO system as a whole is learning and adapting. But it can influence how they carry out their work.

“We share workshops, put on workshops together because they work in other areas.... Also they have very good publications, so they share those with us.”

“There are [workshops] where, yes, one identifies new tools for work that can be used and... integrates what we have learned and follows up on the workshop.”

“Recently [they] developed a workshop on climate change and adaptation, something that they are very good at. They have good materials..... We attended the workshop and... we had a lot of sharing about the experiences we have had. “

Workshops may be a place to share knowledge, but one person expressed frustration that it is not always possible for NGOs to put the new information to use. Sometimes the ways of working that are presented are just too expensive to be practical for his organization, highlighting that if shared knowledge cannot be used and no change happens then it is not a successful learning experience.

There were several laments that not enough learning takes place. One long time NGO director recalled almost wistfully a two-day guided reflection after an earthquake response several decades ago. He remembered significant learnings for him coming out of that time. But NGO staff are a busy group, often too busy to take the time they would like to reflect on their work. People do share experiences informally, but many agreed that learning could be enhanced if it were a more formalized process.

“We do share some experiences – how it went for an organization in such and such a project – but there is not a formal process to see what lessons we have learned or to work together. It’s more focused on topics.”

“The truth is we don’t have much time for dialogue and reflection about the work of one or the other.”

“I don’t know if I should say it’s a cultural thing...but we don’t have so much of writing, of organizing into a system, and ...giving ourselves more official places to learn.”

NGO interviewees several times talked about places where they would like to be learning more. Better knowledge of how to deal with psychological effects of trauma was one.

“In the case of people who have lost their things, psychologically they remain damaged, you have to work with therapy.”

We didn’t do anything about going into those communities and helping [where people were lost and never found].... They didn’t do the job because I don’t think they knew how.

Another new area of work which one NGO was promoting was “sustainable food security...and at the same time work on restoration of the ecosystem.”

Overall NGOs could see some change in the way they worked, primarily in their emphasis on working together. But there was also a sense of regret that more learning was not happening.

Research Proposition 6 – Aggregate Outcomes:

“It is expected that NGO staff will be able to describe the overall results of the work of the group of NGOs.”

Recognizing and articulating collective outcomes from the combined work of NGOs that any one NGO could not have done on its own was challenging for NGO staff. There was widespread acknowledgement of the importance of ongoing coordinating and collaborating with each other while carrying out projects. But identifying and articulating an aggregate result of their work was difficult. The more recent emphasis on working together on projects did not appear to have translated into

an ability to describe themselves as a system of organizations capable of producing an aggregate result.

The primary challenge blocking the ability to articulate an overall NGO outcome appeared to be the competition for funds. Contradicting the assertion by a fair number of interviewees that NGOs are not competing with each other, when it came to raising money NGO staff emphasized their own organizations, “because that’s who we’re looking to fund, right?” In external communication they would focus on their own work because they were not trying to “sell other organizations,” as another person put it. NGO’s tend to want to take credit for positive results, to say that “this is a direct result of our input.”

Broader collaborative work probably will not be emphasized in written reports to their headquarters offices or to funding organizations. “If we’re trying to achieve certain results we want to think we’re responsible for the results, not what another organization is doing.” In short, the need to ensure that their funding lifeline continues made NGOs revert back to a more competitive view of their fellow organizations.

Nevertheless many interviewees did give a tentative nod when asked if they could describe a collective result of NGO work. This was most common when they were working in a jointly funded group of organizations. “If we are a consortium of NGOs implementing a certain project, it’s necessary to talk about three NGOs, right,” because finally all three NGOs share the credit for any results that might be achieved.

When NGO personnel were able to step back and see a goal larger than the outcomes of one particular project they were also more able to articulate an aggregate result. One person who had worked extensively on climate change adaptation projects talked about it needing widespread involvement:

“We see it more as an effort of the country, in other words, taking on risk management work implies participation of a lot of actors. We don’t think...tackling the theme... and above all, achieving change, should be the sole work of one organization. On the contrary, we think that it’s an effort that should include...the people in the [rural] territories [and] the need to articulate ourselves, whether we are NGOs, or government entities that are promoting actions in the territories. In other words, we see, we, every day, we see working in networks as more important.”

For this project director, climate change was “a little more complex” than disaster impact work. It was seen as such a large issue that it must be worked on by all, and the results therefore will be the results of all combined. Another NGO project coordinator also referred to larger than project outcomes when he said that those places where people get together to discuss joint action is also where they talk about “meta outcomes.” These last two interviewees were the clearest examples of NGO staff talking about aggregate outcomes. Other NGO personnel did not deny that aggregate results might be achieved, but were unable to easily describe it.

Government Relations

Because NGOs do operate in a larger national environment that is overseen by a government, the interviewer also asked each organization about its relationships with the government. NGOs have a many-layered relationship with the government that is hard to generalize. They said they welcome the coordination that a government can offer in disaster work, yet they remain wary of the political nature of government. Conditions such as where NGO funding comes from and an expectation that NGOs help fund the Honduran government agencies will probably ensure that the relationship will remain complicated.

The question asked interviewees did not specify which government it was referring to, but interviewees inevitably commented on their relations with the Honduran government, either local or national. But NGOs often do not have both feet planted inside just one country's national boundaries. While their operations may be carried out inside the geographic boundaries of one jurisdiction, they may be receiving funds from another government. This is often true for both INGOs and local NGOs. In addition, the headquarters offices of INGOs are located in a second country. This kind of relationship with two or more governments can make for a foggy external environment where it is unclear to which government the NGO is more responsive. Multiple governments may be trying to influence NGO action. For example, one long time NGO worker told the interviewer that the founding of FOPRIDEH in 1981, the primary coalition of NGOs in Honduras, was paid for by the U.S. government, raising

potential questions about what the United States was trying to achieve at the time and how the Honduran government might have seen its creation.

The relationship with multiple governments may be one of the dynamics behind the decidedly mixed feelings as NGOs thought about their relationships with the Honduran government. There were as many positive as negative comments, often both from the same NGO.

“The government tries to...support in the way that they can in the communities. The relationship with the national government is very good.”

“Uh...yes there have been times of tension.”

“My relationship with the government has never been bad, but when I discover corruption I try to avoid that....I discovered some situations there and I had to leave.”

Some NGOs felt that relationships were better with local governments than with the national government. Some were more comfortable with the national government. One person observed that in their experience the smaller the local municipality, the better the relationship with the NGO. Others talked of having good access to the government at the ministerial level. The NGO that seemed the least connected to the broader group of NGOs seemed the most connected to various government agencies.

Over the past years NGOs seemed to have developed better dynamics in their relations with government and NGOs. They credited both a change of NGO attitude and more openness on the part of the government for the improvement.

“There are meetings with COPECO in the regions, and each organization on the ground shares where I am, what I do....Our attitude as NGOs has changed.”

A better relationship meant that the NGO community expected the government to step up their coordinating activities, according to one NGO representative. Another agreed that should happen, saying that the best coordination of disaster oriented work happened when the government was doing the coordinating because it kept NGOs in line.

Although one NGO said that establishing and maintaining their legal status was their only contact with the government, most NGOs reported plenty of interaction with government. In community oriented work, NGOs said that when they are doing disaster projects they usually begin by approaching the CODEMs, community level committees organized by the national agency, COPECO. COPECO also makes an effort to keep NGOs abreast of what they are doing, as they did in the regional meeting in San Pedro described in the introduction to this paper. During the meeting COPECO introduced the new commissioner, gave a general organizational update and had their meteorologist give an overview of what weather might be expected in the coming two to three months.

However, the logo of one of the NGOs interviewed for this project was prominently featured on the COPECO slides shown in the meeting revealing that at least part of the funding for the gathering was provided by the NGO, illustrating another dynamic between NGOs and government. “...Many times the governments think that [NGOs] have enormous amounts of money,” said one NGO director. A

program director for a much smaller NGO agreed that nongovernmental organizations are frequently asked to provide funding. “Due to what is happening in the country...the government doesn’t have funds, so from the institution we pay their gasoline and...food.”

“And if we don’t have it,” added another, “we’re messed up.”

This phenomenon would seem to be a complicating factor in NGO-government relationships as there would be a built in tension when NGOs both expect coordination from government agencies and provide funding for those same agencies.

Improvements in NGOs’ perceptions of government relations notwithstanding, they continue to feel frustrations with their interactions with government at various levels. Government corruption has been a frustration and several NGO representatives told stories of their interactions with corrupt officials. NGOs also expressed frustration with what they saw as incompetence of government. Several pointed out that the Honduran government was ill prepared for a major disaster like Hurricane Mitch. “It was a complete disaster of disorganization,” said one director.

Government taking credit for work that NGOs felt that they had carried out in order to convert it into political points was mentioned several times as an ongoing frustration. One NGO director recalled a disaster recovery project where they had completed a major reconstruction project, took government officials to visit the rebuilt community, “and later we had...the perception in their report that they were talking about everything that they had done, but they were talking about what we had done.”

“Emergency help is always politicized,” observed another director. And sometimes politicization goes hand in hand with corruption. “....Local communities are [correctly] involved, the local government and so on. But it is so obvious that the mayor and his cronies benefit their political allies [with the disaster recovery assistance] – and that’s from the top to the bottom. It’s their world.”

This interview quote, in addition to pointing out the potential benefits politicians might wrangle out of disaster work in their communities, acknowledges that NGOs work in the jurisdiction of government and politicians. NGO work, said one, “is not to supplant or to take over the responsibilities or the functions of the government. It’s more to support the actions that the government is prioritizing.”

An additional frustration that NGOs expressed with government was the frequent turnover of government personnel as each new government names its political appointees. “We think we have established [relationships] with the institution, but it turns out that they’re with the people....” When new people are installed in government agency positions, new relationships need to be built.

“Every four years you have to explain to them again...you have to transfer the information.”

Chapter 5

DISCUSSION AND CONCLUSION

Over the past months as this investigator has shared the plans for this study with a variety of people – some who have experience working with NGOs, as well as many who do not – the most frequent response has been an almost knowing chuckle, followed by, “but NGOs don’t work together.” But the interviews with nongovernmental organizations in Honduras showed that the staff persons of these organizations do a great deal of working together. In general, their interactions show characteristics that both point toward a complex adaptive system formed by NGOs in Honduras and factors that detract from that conclusion.

Whether the interactions among NGOs constitute coordination at a system level is also a question that may not be completely answered even by a close examination. The way that NGOs approach work together appears unsystematic and organic and can be redundant and inefficient, in spite of the desire of NGOs to maximize efficiency. Participation in coordination and collaborative efforts was inconsistent, making it difficult to definitively state that the set of NGOs active in disaster together constitute a CAS. Perhaps the uneven participation means the system of NGOs that was found could be described as having blurry boundaries that make it uncertain which NGOs are inside and which might have one foot outside the system. At any given time different configurations of NGOs may function more or less as a

CAS as they navigate their environment, sometimes working more as a system of organizations, at other times less so. Consequently, it may be difficult to name the NGOs that are inside CAS boundaries at any one time, making it challenging to conclude that the group of NGOs function as a complex adaptive system.

Together they painted a picture of a group of organizations working in ways that sometimes seemed contradictory (Are they competitors or collaborators?), sometimes seemed overenthusiastic (How many coalitions are there?) and sometimes seemed like one big family (Does information reach an NGO whose staff does not know the others?).

In many ways the interviews showed a group of organizations that more or less fit into the CAS definition offered earlier in this paper: a set of agents that interact with each other to form a whole entity without the benefit of an explicit central control mechanism. But as the summary of interviews showed, NGO staff did not describe CAS characteristics consistently. The final pages of this thesis will explore how the interviews supported and contradicted previous findings about NGOs, their ways of working and how it aligns with a description of complex adaptive systems.

Self-Organization and Coordination

The description of NGOs in the literature reviewed above identified seven barriers that made it difficult for nongovernmental organizations to engage in coordinated activities: 1) NGOs are accountable to donors; 2) Coordination requires too many institutional resources; 3) No agreement on who should be coordinating; 4) NGOs come and go quickly; 5) No agreement on what kind of coordination; 6)

Coordination detracts from individual identity; and 7) Competition among NGOs. Had these barriers been high enough it would have been difficult to observe any kind of collaborative activity among the organizations; they would have prevented organizations from engaging in self-organizing activity. The number of alliances and networks that have been established pointed to some effort at coordination and suggested that several of the obstacles identified in the literature were not as high as anticipated, although the number of different kinds of organizations may in fact decrease the level of efficiency of disaster work as Comfort, Siciliano and Okada (2011) concluded from their study of organizations working in Haiti following the 2010 earthquake. .

The search for funding was emphasized as a primary barrier to coordination (Gillman 2010, Sylves 2008, Coppola 2005). But the interviews showed that funding doubles as both a facilitator to coordination and forms a barrier to it. NGO staff persons emphasized that the search for funding stimulates them to come together in order to gain a better chance at securing financing for their projects. Those who had engaged in joint projects did not mention the possibility that such cooperative ventures might inhibit their ability to promote their own organization. On the other hand, many NGO staff persons also recognized that the competition inherent in the search for funding does force them to compete with each other.

Seeking funding, then, in the way that many NGOs do – writing grants to fund specific projects – is both a force that begins to build a complex adaptive system by encouraging banding together with other NGOs, and an entropic pressure that pushes

them toward greater disorganization (Byrne 1998, Innes and Booher 1999). Jointly implemented projects may serve to bring them together, but when the funding is gone the force of entropy will tend to pull them back into the original equilibrium of formally unconnected NGOs. If funding again becomes available they may regroup in an entirely different configuration of organizations. The decision to join with others or to compete with them at any point in time would seem to be one of the lever points identified by Holland (2006) that can move a system to greater or lesser organization. That decision can be influenced by factors within the organization – its schemata, by incoming communication from other NGOs that is available to them and by other sources external to the group of NGOs – availability of receiving their own funding, for example, or what the government might be encouraging them to do.

A disaster is one of the external conditions that affects the actions of NGOs. Following a disaster, governments, the UN and others generally have larger funding pots that NGOs can draw from. Several NGOs interviewed recounted that they ramped up their activities following Hurricane Mitch. A question for further research would be whether the funding availability in a future calamitous disaster event would act as a stimulus for greater organization or not. As the interviews quoted above showed, Hurricane Mitch seemed to stimulate more collaboration, but the plentiful availability of funding may also encourage NGOs to seek their own financing rather than work more together. If more NGOs were able to secure individual financing it could add to the coordination confusion that seems to be common following disasters.

Funding as an impetus toward organizing or away from it did not seem to affect all NGOs alike. Midsize NGOs that depended more on donations from members of their supporting church denominations rarely mentioned grant funding in their interviews. The smallest organizations interviewed depended on funding from specific sources – grant funding seemed to minimally affect their interactions with other NGOs. In these cases funding may not play much of a role in either bringing NGOs together or edging them apart.

Among other barriers to coordination, there were just a few comments about the investment of time and finances that working with other NGOs entailed. It did not seem so much perceived as a misuse of their funds as the literature suggested may be the feeling, but rather was sometimes seen as taking away from the efficiency they were seeking. “We...spend too much time talking about what should go into a relief bucket...” Many were investing a great deal of their time into joint activities. The overall amount of time and resources that NGOs invested in coordination activities seemed rather astounding to this observer, and signaled that the expense required to engage in coordination activities may not be a significant barrier to working together.

The lack of consensus as to which alliance or network was the most significant coordinating body for most of the NGOs did confirm one barrier to coordination that was identified – the lack of consensus as to which coordinating body to be a part of. The number of alliances and networks suggested that NGOs were actively seeking better ways to organize themselves, perhaps not disbanding previously established networks, but simply creating additional ones that met their particular needs or that

were made up of NGOs with more affinity toward one another. This again suggested an entropic force at work. Interviewees talked about the process of revitalizing two of the alliances; they had been created, had not received the energy necessary to maintain them, but had not disappeared. NGOs were injecting energy into them again with the goal of reconstructing their usefulness.

Some of the coordinating bodies that interviewees mentioned included agencies outside the NGO community such as the OCHA sponsored Red Humanitaria. But the fact that only one of the organizations mentioned the Red Humanitaria as the primary disaster organizing entity suggested that it was perhaps not as widely recognized as one would expect for a United Nations disaster organization.

There were suggestions that a consensus may be building that COPECO is the legitimate disaster coordinating agency in Honduras. Several organizations expressed satisfaction with regional meetings such as the one described in the introduction of this document, where all institutions involved in disasters “share where I am, what...I do, what I am going to do in the coming months...Our attitude as NGOs has changed.”

Changing attitudes toward government disaster management notwithstanding, the 16 organizations still identified 12 coalitions, apart from COPECO’s coordinating efforts, that were involved in some way in disaster work implying that there may be some differences as to which NGO will go to which network when they want to engage in coordinated NGO activity. In the first five interviews conducted in this research project, all five named a different entity as the most significant network for them for working together with other NGOs in disaster work.

On the one hand NGOs organizing into coalitions suggested the self-organizing that one expects to find in CAS, but the existence of so many groups raises the question of whether so much organizing may be counterproductive and result in increased disorganization rather than higher organization. Even if NGOs are more inclined to grant COPECO a major disaster coordinating role in the country, it may be difficult for COPECO to be effective in that capacity if the nongovernmental organizations continue to also coordinate their work through multiple other coalitions, alliances and networks.²

In general the NGO instinct propelling them to form alliances, networks and coalitions seems stronger than the barriers that keep them apart. The multiple ways in which they have banded together may seem somewhat bewildering to an outside

² To illustrate the difficulty of COPECO's task, return to Table 2 on page 69. Imagine that another storm of Hurricane Mitch's magnitude strikes Honduras and COPECO attempts to take on their responsibility to coordinate the disaster response by working through the UN's Redhum where NGOs A, E,F,I, J, M, N, O,P are all active members. But NGO F, a member of Redhum, is also coordinating actions with NGO G in the ACT Alliance which is sending in major amounts of relief supplies and which may or may not take Redhum's coordination into account in their decisions. And NGO I, also part of Redhum, is also coordinating projects with ACI and NGO K which is not a part of Redhum. In addition, the Integral Alliance is capable of marshaling a strong response from its international donor base, but none of its members are members of the Redhum. The interconnected web linking NGOs together as described here will probably eventually sort out the responses of NGOs – they will watch what each is doing, they will share resources, they will not go into areas where they know another is working – but it may be challenging for COPECO in its official disaster role to coordinate the overall response or even to be aware of everything that is happening.

observer, but it also appears to be the kind of dynamic, organic, nonlinear organization that complexity theory would predict.

Relationships, Communication and Learning

Taking into account the roles of COPECO and the UN, through the Red Humanitaria, in NGO coordination begins to describe the external environment that interacts with the system of NGOs. This research project assumed that if NGOs formed a complex adaptive system, external and internal environments would exist, and did not specifically explore a systemic internal environment. Nevertheless, the prominence given to personal relationships throughout the interviews highlighted a feature of the internal NGO system environment that has a bearing on how other aspects of the system functions.

This study found a small NGO world in Honduras where everyone claimed to know everyone else, although in actuality the personal links of relationships may describe several interconnected subgroups of the NGO system rather than a system as a whole. Staff from large NGOs seemed to know each other well. Two of the NGOs classified here as small also talked about their connections to other large NGOs with a fair amount of familiarity, and were referred to by large INGOs as true counterparts (rather than funded partners).³ This contrasts with Postma's (1994) study of NGOs in

³ The connectedness of these two small NGOs shows a weakness in classifying the organizations according to budget. These two NGOs were labeled "small" because they were local NGOs with no larger organization backing them up, hence their operating budget was significantly smaller than others – under the \$10 million limit while some of the others' were many times over the \$100 million mark. However, in

two African countries which found that local NGOs felt unable to gain access to the information flows of INGOs. The other small NGOs in Honduras, however, and several midsized INGOs did not seem to have the same relational connections to the others.

The relational links may be an example of Kapucu's (2006) finding that it is not only adequate information flow, but the quality of the links that are important in the functioning of a disaster system. A system that depends so heavily on personal relationship links will likely have good quality connections that ensure good information flows where the relationships exist. But it will also probably be inconsistent because it is unlikely that everyone will have equal quality of relationships with everyone else.

The unevenness of the communication links and their dependency on personal relationships is also interesting to observe in light of Brede and de Vries' (2009) observation that resilient systems have multiple and less optimal communication paths that may be redundant. The personal connections in combination with the formal communication channels found in meetings and reports may repeat the same information, but make the system as a whole a resilient one that does not depend on only one kind of communication. Brede and de Vries (2009) also showed that longer and more flexible communication flows facilitate a system's learning; if one

Honduras these two were extremely well connected to the world of large NGOs and in many ways functioned more like large NGOs than did some of the midsized organizations.

communication channel doesn't work another one might. The fact that "we all know each other" means that there are many ways that information can be passed around.

But the ways that different NGOs commented on their relationships with all the others suggested that they do not all know each other with the same amount of familiarity; communication that depends on relational channels can easily result in uneven information flows. For example, if two people have shared information between themselves they may not remember the need to share it at a larger meeting, resulting in a truncated flow of information. When communication is passed between two people who know each other well, it may have a different effect on decision making than when that same communication is shared in a meeting.

Information flow has been found to be an influential factor in a system's ability to adequately carry out disaster work. (Kapucu 2006, Comfort and Kapucu, 2006). The inconsistent, relationship-dependent communication links among NGOs in Honduras, confirms other research that found uneven access to information (Moore, et.al. 2003) among NGOs. This study focused on NGO's self-perception rather than an evaluation of actual work performed therefore did not ask how the informal character of much of the information flow might have affected actual disaster work.

Aggregate Results

The difficulty that NGOs felt in articulating an aggregate outcome of their work was significant, but hardly surprising in light of the competition that does exist among them. Anderson's (1999) finding that CAS agents will act in their own self-interest seems consistent with interviewees who declared that NGOs were competitors.

They may have been more accurately describing the NGO system than the many statements that said NGOs were not competing against one another. In other words the spirit of collaboration that interviewees highlighted may in fact not be as strong as they would want it to be. If NGOs are unable to see and describe an aggregate outcome of the overall work of NGOs, it probably is not in their best interest to do so. Their self-interest may either prevent them from seeing an aggregate outcome, or such an outcome may not exist.

The challenge in a study of this nature that is documenting self-perception is that while the competitive dynamic among NGOs may blind them from seeing their work in an aggregate way, to an outside observer there do seem to be accomplishments and working styles of an overall NGO system. Interviewees gave examples at various points in the interviews, even if they did not identify them as collective undertakings when answering the interview question on collective outcomes. One was the distribution of material resources after a disaster. Two NGOs mentioned maintaining a stockpile of goods and also talked about distributing those supplies through other NGOs. Neither could have carried out as good a distribution on its own as they were able to do when the supplies were made available to a number of NGOs to distribute in the areas where they carried out their work. Frequently NGOs talked about looking to other NGOs for expertise in areas where they themselves lacked experience or knowledge, another example of work that the system did together that could not have been done by any one NGO on its own.

An ongoing question then is whether the NGO's lack of ability to observe a common outcome to their work prevents them from acting as a complex adaptive system.

CAS Theory Weakness

The discussion of uneven access to communication channels highlights a weakness of complex adaptive systems pointed out in the "All NGOs are not created equal" section of Chapter 2. This study of NGOs has shown that a group of NGOs in Honduras demonstrates some of the characteristics of a CAS, but it did not attempt to explore possible power differentials that might be found inside the internal environment of the NGO system. The uneven access to information that the NGO agents may experience suggests that decision making will vary among the agents because dynamics inside the internal environment of a system will determine the kind and quantity of the information that each has, which may influence decision-making as much as the push to self-organize and the norms they follow.

Other factors that influence how organizations inside a system of NGOs function that were largely unexplored by this study included the role of headquarters offices in Honduran NGOs and how religion may affect NGOs. The prevalence of faith-based NGOs suggests that religious orientations may play a role in the NGO decision-making processes, coming both from NGOs' internal schemata and from the external environment in Honduras. The influence of religion in the NGO environment is a little studied phenomenon (Berger 2003) making it difficult to suggest the extent of influence of a faith based orientation.

Another issue that this CAS research did not lend itself to exploring was the role that international headquarters offices might have in shaping INGO relationships with other NGOs. The headquarter office relationship could potentially be viewed as a part of an organization's internal schemata, as a part of the external system environment, or even, it could be argued, as a part of a system's internal environment. Each of these approaches could lead to deeper understanding of how an NGO makes decisions and how it relates to others in the system. Both religious and international headquarters offices influences suggest that some NGOs have multiple accountability points which possibly affect relationships with other nongovernmental organizations and which merit further research.

An additional internal environment dynamic that could be investigated in order to understand the NGO system better is the way funds are passed among the organizations. Because the current study was only designed to look at the extent to which a group of NGOs conformed to CAS characteristics, the partner relationship – one NGO providing operating funds to another – was excluded from this picture of the NGO system. Nevertheless, funding is a powerful shaper of dynamics, with money often coming with funder defined strings attached (Duwe 2001). The fact that some NGOs provide funds to others almost certainly will have a degree of influence on the internal environment of an NGO complex adaptive system. How uneven information flows and funding channels found inside the internal environment affect the manner in which NGOs function while working together are questions that could be explored in further study.

CAS Theory Strength

On the other hand, viewing the NGO world through complex adaptive systems theory gives a picture of the tenaciousness of the system of NGOs as a whole – an organic, tangled, messily interlinked group of NGO agents that together seemed to compose a resilient system well suited to take on various aspects of disaster work. Most definitions of resilience in some way include the concepts of self-organization and adapting to stress and change (Pelling 2011, de Bruijne, Boin & van Eeten 2010, IPCC 2008). This research allows one to see a system that has demonstrated an ability to adapt to a variety of conditions and that has shown a remarkable capacity at self-organization in different contexts.

Brede and de Vries (2009) suggest a continuum between resiliency and efficiency. Several of the NGOs interviewed described their interest in operating as efficiently as possible. They may have gained efficiency in the way they distribute disaster response supplies or in their way of dividing geographical zones, but the way that the overall system of NGOs is organized seemed to tilt toward resilience more than efficiency. An efficient system, Brede and de Vries found, has short, strong links between agents. The relational style connection among NGOs in Honduras seemed long and flexible; they can go various places to find what they need. If one organization cannot do a workshop on a certain topic, for example, they will look around until they find one that can.

Observing the flexible connections helped to demonstrate a complex adaptive system trait – a non-linear system without a central control mechanism (Holland 2006)

which lends a certain unpredictability to the decisions that individual agents make. Stepping back from the apparent randomness of individual decisions about which network to join or which area to begin work in, allows one to see a system seeking the edge of chaos sweet spot in which to function (Anderson 1999), to appreciate the strengths that NGOs as a group bring to the many needs that a disaster-prone country like Honduras experiences.

Policy Implications of NGOs as a Complex Adaptive System

Governments are usually the highest authority in a country and as such are a major influence in the external environment of an NGO system. NGO interviewees interacted in multiple ways with the Honduran government and expected that the government fulfill its disaster coordination role. But governments, organized as they commonly are in a classic bureaucratic structure, may find it difficult to understand and work with a group of organizations that fit a complex adaptive system description better than a bureaucratic system description. The inconsistent and sometimes confusing interactions that constitute NGO attempts at self-coordination illustrate the nonlinear nature of complex adaptive systems – they don't always make sense to the outside observer. It gets the job done and provides a lot of options for NGOs inside the system to wiggle into the configurations that are most suitable to them at any given time. But this way of working may feel contradictory to the organizational impulses of a government agency whose mandate is to coordinate the disaster work of the country. How does a nonlinear system that bases its decisions on feedback from many

different sources fit into the more bureaucratic and linear nature of a government agency that expects decisions to be based on a line structure?

An exchange in the OFDA meeting this researcher was able to attend illustrates the tension. After an instructive and well done explanation of an impressive climate change project being carried out in a barrio of Tegucigalpa, the COPECO commissioner asked why this project wasn't being coordinated through COPECO. The presenting NGO, one of the organizations interviewed for this project, answered by saying that it would be very difficult for the commissioner to keep up with all of the projects in all of the 350 or so barrios in Tegucigalpa, and that they were, in fact, relating to CODEM, the local disaster committee.

The NGO in question had decided to take on this project based on its own assessment of need, the cooperation of the local disaster committee and a grant from an international funding source. It was being observed by other NGOs – it was in response to this NGO that another organization, quoted in the last section, had remarked that grants were more likely to go to urban work than to rural work – and it was communicating formally about its work. The logic of CAS theory says that changes will be made as each individual agent considers its own best interest (Anderson 1999), therefore it would be conceivable that more agents in the NGO system would turn their focus to urban climate change adaptation work. Upon seeing the first NGO carry out an urban project with excellent potential combined with a perception that grants were more likely to be awarded to urban efforts, many NGOs

might find it in their best interest to develop similar work. In other words, the system would learn and adapt to the changing conditions.

But it is unclear if this kind of project done in this way was a priority of the national government. The commissioner's reaction, at the least, suggests that the government was not involved in the decision to start the project. Even if it had been fully briefed and consulted, CAS theory suggests that COPECO's input into the decision would likely be included as one factor among others for an NGO to consider. Availability of funding, what other NGOs are doing and if the proposed direction is consistent with the internal mission of the NGO would be some of the other conditions that NGOs would consider.

Honduran law grants COPECO the authority to guide disaster work in the country. Interviewees were clear that NGOs recognized COPECO's governmental responsibility, but at the same time, as this research has shown, they are individual agents that grant the government varying degrees of authority to guide them. The practical question underlying this study is whether an explicit CAS perspective on the group of NGOs active in disaster work in Honduras could improve the government's ability to utilize the services that NGOs offer, as well as the capacity of NGOs to coordinate themselves. Attempting to coordinate such a system has many potential frustrations particularly when the government organization, or even the internal organizational model of many NGOs themselves, is decidedly more bureaucratic in its structure.

Even the definition of complex adaptive systems offered earlier in this paper – sets of independent agents that interact with each other to form a whole entity without the benefit of an explicit central control mechanism – suggests that management of a whole system may be challenging. How can a system with no central control be coordinated? Innes and Booher's (1999) finding that CAS agents feel more pressure to drop out of a system if they feel manipulated or that their views are being suppressed implies that direct control may be counterproductive. The government and others who want to manage an NGO complex adaptive system help meet their disaster needs will likely be more successful if they find indirect ways to manage it.

Indirect management, though, is not usually the first thing that comes to mind when considering disaster work management, which seems to have a natural penchant for management structures more oriented in the command and control direction. Any government, however, that has attempted to shape the actions of its people with tools such as tax policy, should be familiar with indirect management. For example, if the Honduran government wants to focus on urban climate change adaption when, traditionally, NGOs have prioritized rural work, it could inject census data highlighting urban need into NGO system-wide information forums, lobby large funders to prioritize financing urban work and make it as easy as possible for an NGO to set up urban operations.

NGOs themselves should be aware that patterns such as their tendency to create new alliances can be confusing and make it more complicated for those outside

of their system to work with them. Anyone working with NGOs as a group will need to tolerate their redundancies and apparent disorganization.

Conclusion

This study has shown that the group of NGOs active in disaster in Honduras in varying degrees demonstrates many of the characteristics of a complex adaptive system. They operate out of an internal institutional base called a schema; information flows among them through multiple communication channels; they have a proclivity for organizing themselves into various group configurations, dropping or changing them, then reorganizing; they tend to follow norms that guide their interactions with each other; and they have demonstrated an ability to learn and adapt to changing conditions. From an outside perspective it appears that the system as a whole is able to do things which any single NGO could not accomplish, although the NGOs themselves found it challenging to describe them. The research has also observed continual forces acting against complex adaptive system formation. NGOs organize themselves into various coalition configurations and then allow those to lapse. Inconsistent communication among them means that some NGOs are more linked to each other while others appear to be working on the edges of a larger system. It is challenging to demonstrate an aggregate result that is distinct from the individual results that NGOs achieve on their own.

While there it cannot be conclusively stated that NGOs in Honduras fit all the characteristics of a complex adaptive system, observing the extent to which the group of NGOs in Honduras does match the characteristics of a complex adaptive system

may be useful in aiding understanding of how NGOs carry out disaster in the context of a country where NGOs' access to financial resources may be as great, or even greater than the funds that a government can raise.

However, as the comment on the weaknesses of complex adaptive systems theory shows, viewing NGOs through a CAS lens, while helpful as far as it goes, may offer a somewhat one dimensional view of the NGO world. Much remains to be explored to get a fuller understanding of the internal dynamics of NGO interactions and their relationship with those outside their organizational boundaries. In other words, how do the influences coming from the system's internal and external environments affect how NGOs carry out their disaster work?

This was a qualitative study of the NGOs working in Honduras. The particularities of the Honduran context and the NGOs working in the country make it inappropriate to make inferences to NGOs outside of that context. For instance, in spite of the government's renewed enforcement of NGO legal requirements and push to close down organizations that had not kept their legal papers up to date, the Honduran context is actually quite friendly to NGOs in general. They operate fairly freely, carrying out a wide variety of tasks. One NGO said that they have almost no contact with the Honduran government other than keeping their legal papers in order. In another context where a government might place more restrictions on NGO movement there may be an entirely distinctive picture of NGOs and their system-wide dynamics.

NGOs have been and in all likelihood will continue to be a force in disaster work all over the world. Governments, the United Nations and local communities will continue to interact with them in a variety of ways. It is hoped that this study into one country will deepen understanding of how nongovernmental organizations carry out their work and stimulate additional studies that will further fill out the picture. It is also the hope of this thesis that better understanding will ultimately result in better disaster work.

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Appendix A

RESEARCH QUESTIONS.

Begin by introducing myself, my previous experience in Central America, thanking them for taking the time to speak with me, and explaining why I'm working on this research project: More and more NGOs are being recognized by government and UN disaster agencies as playing a major role in disaster work. It is estimated that in a major disaster NGOs together contribute about as many resources as the UN toward recovery activities. But NGOs are often characterized as a bunch of cats that are hard to coordinate. I am trying to explore in a more in-depth way how NGOs interact with each other as they carry out their disaster work and whether or not the work of each NGO affects that of other NGOs. So I have five broad areas that I want to ask you about. We'll take about 10 minutes for each area so that I will not take more than an hour of your time.

Question 1: First of all, please briefly describe your organization.

- What is your primary mission?
- What do you do and how do you do it?

Pregunta 1: Primeramente, favor describir brevemente su organización.

- ¿Que es la misión fundamental de su institución?*
- ¿Qué hacen y como lo hacen?*

Question 2: I'm assuming that you have contact with other NGOs as you go about your disaster work. How do you communicate with them?

- Are there formal channels to talk to each other? What are they?
- What are the informal ways that you communicate?
- Do you consciously look for staff from other organizations to discuss what you are doing?
- If you do, which ones do you look for and why do you seek out those particular ones?
- How would you describe your relationships with other NGOs?

Pregunta 2: Se supone que ustedes tienen contacto con otras ONGs mientras llevan a cabo sus proyectos relacionados con desastres. ¿Cómo se comunican ustedes?

- Habrá canales de comunicación formales? ¿Qué son?*
- ¿Cuáles son los medios de comunicación no formales que usan?*

¿Busca usted miembros de los equipos de otras ONGs para que ustedes puedan platicar sobre su trabajo?

-Si es así, ¿Cuáles organizaciones busca y porque busca esas ONGs en particular?

-¿Cómo se encuentran con las otras organizaciones?

Question 3: During the latest disaster project that you worked on, did you work in cooperation with or have communication with organizations that you hadn't worked with before?

-If so, how would you describe your contacts with the other organizations?

-Did you notice any organizations that hadn't worked with a disaster before?

-Did you notice any new organizations working with other organizations that you were familiar with?

-Did any new organizations form?

-Did any new formal coalition or cooperation form?

Pregunta 3: ¿Durante el último proyecto de desastre que esta ONG llevó a cabo, trabajaron ustedes con alguna organización nueva, o tuvieron comunicación con alguna ONG con la cual no se había comunicado antes?

-Si es así, ¿cómo describirá sus contactos con las organizaciones nuevas?

-Se fijó en alguna organización que no había trabajado en desastres anteriormente?

-¿Observaron nuevas organizaciones colaborando con otras ONGs conocidas?

-Se formaron organizaciones completamente nuevas o nuevas coaliciones?

Question 4: How would you describe your contacts and relationships with other NGOs? Do you have expectations about how you relate to each other?

-How do you want other NGOs to relate to you?

-What do you like about relating to other NGOs? What don't you like?

-Can you describe how relationships with other NGOs develop?

Pregunta 4: ¿Cómo se describiría sus contactos y relaciones con otras ONGs? ¿Hay expectativas en cómo se relacionan?

-¿Cómo quiere que las otras ONGs se relacionan con ustedes?

¿Que aprecia de los contactos con otras ONGs? ¿Cuáles cosas o elementos no aprecia?

-Puede contar como se desarrollan las relaciones entre ONGs?

Question 5: How do you think it affects you when you watch other NGOs working practices?

-Has any NGO ever asked you how you do something and then changed their practices after you talked?

-Did you ever change the ways you were working after you saw how someone else was doing it?

-What makes you change how you work?

-What do you think makes other NGO change?

Pregunta 5: ¿Cómo cree que les afecta cuando ustedes observan lo que otras ONGs están haciendo?

-¿Alguna vez, una ONG les ha consultado sobre como realizan una cosa y como resultado de la conversación ha cambiado sus operaciones?

-¿Ustedes han cambiado alguna práctica como resultado de observar a otra entidad o de hablar con ellos?

-¿Cuáles cosas hacen que ustedes cambien su manera de trabajar?

-¿Según sus observaciones cuales cosas hacen que otras ONGs hacen cambios en sus trabajos?

Question 6: How would you describe the results of NGO disaster work, not just your work, but the work of all NGOs that work in disaster combined?

-Do you ever talk about NGO work like that?

-Do you belong to any coalitions that describe the work of their members as the total work of the coalition?

-Is there any value to be gained by looking at the overall NGO work as opposed to concentrating on the work of your organization alone?

Pregunta 6: ¿Cómo describiría los resultados del trabajo de desastres de las ONGs, no solo el trabajo de su organización, sino el trabajo de todas las ONGs que se involucran en desastres?

-¿Ustedes hablan así – cuentan del trabajo en conjunto de las ONGs?

-¿Ustedes como ONG pertenecen a alguna coalición que describe el trabajo de sus miembros como una solo entidad, como el trabajo de la coalición?

¿Hay valor en considerar el trabajo de las ONGs en su conjunto, en vez de enfocarse solo en el trabajo de su organización?

Appendix B

. RESEARCH PROJECT TIMELINE

Proposal approved by February 28

March 1 - 26: Gather data in Honduras and El Salvador, transcribe and translate interviews.

April 1 – 15: Gather data from NGO web sites.

April 15 – June 15: Analyze data and write thesis draft

June 15 – August 15: Thesis research approval process

Appendix C

NONGOVERNMENTAL ORGANIZATIONS INTERVIEWED Honduras offices only

Catholic Relief Services
Caritas San Pedro
Diakonia Nacional
Global Village Project
GOAL
Habitat for Humanity
Help in Action
MAMA Project
MAP
Mennonite Central Committee
Mennonite Social Action Commission
MOPAWI
Save the Children
Tearfund
World Renew
World Vision

Appendix D

RESUMEN DE RESULTADOS

En este proyecto utilicé la teoría de sistemas complejos adaptivos para examinar como las ONGs en el país de Honduras se colaboran y se coordinan el trabajo que cada uno desempeña. En las explicaciones de sistemas complejos adaptivos (SCA) suelo compararlos a las células en el cerebro o un grupo de hormigas – grupos de entidades que a la vista no tienen un líder que los dirige, sin embargo logran hacer resultados que ninguna de las entidades hubiera poder hacer actuando solo. En nuestro mundo moderno las SCAs forman un fenómeno no-linear. En términos de organizacional la manera de organizarse como línea sería la burocracia, donde cada uno tiene su rol, y sus actuaciones supuestamente son predecibles. Pero mirando a muchos patrones de organización modernos es obvio que la perspectiva lineal no describe lo que está pasando. Las SCAs parecen desorganizados, toman sus decisiones basado no en un patrón de actuación sino en las condiciones a su alrededor y en la retroalimentación que reciben de sus entidades hermanas. Si tienen interés en explorar la teoría en mas detalle pueden ir a este sitio de web:
<http://economiaevolucionistaunal.wikispaces.com/SISTEMAS+ADAPTATIVOS+COMPLEJOS>

Se me ocurrió la idea que se podría describir bien y entender mejor el trabajo de las ONGs mirándolas por la lente de un sistema complejo adaptivo. Entonces como ustedes saben fue a Honduras en el mes de marzo y entrevisté 16 personas asociadas cada una con una ONG haciéndoles preguntas según las características de un SCA. En lo que sigue alistaré las características y un breve resumen de las respuestas que ustedes me dieron. Si ven algo que les parece muy desacertado, y con que están de acuerdo, les invito a responderme a dentro de los próximos ocho días.

1. La cultura y condiciones internas de las ONGs. Cada organización tiene su propia dinámica interna que les afecta las decisiones que tomen.
 - a. Las ONGs reconocieron que cada ONG tiene un espacio al interior de su organización que les influye las decisiones que tomen. Tenemos nuestra propia agenda, decían.
 - b. Eran 6 ONGs pequeñas locales u hondureñas, 5 ONGs medianos internacionales, 5 ONGs grandes internacionales (midiendo el tamaño por el presupuesto total de la organización, no solo el presupuesto del programa en Honduras)
 - c. 13 ONGs tenía su base en la fe Cristiana, 7 de ellas eran vinculadas a una denominación específica.
 - d. Ninguna se consideraba un organización que solo trabajaba en emergencias. 3 se especializaban en áreas como salud o casas.

- e. En general las grandes tendían a recibir sus fondos de apoyos de gobiernos u otras entidades financieras. Las medianas tendían a financiarse con donaciones de sus denominaciones. Las pequeñas recibían fondos de otras ONGs.
- f. Todos implementaban proyectos y pasaban fondos u otras entidades para que implementaran proyectos.

Tamaño del presupuesto	Organizaciones entrevistados							
	Language de entrevista		Cristiano	No cristiano	Tipo de programa			
	Sp	Eng			Implementa programas	Financia otras	Holístico	Especializado
Pequeño \$1 – \$10 million 6 ONGs locales	5	1	6	0	6	2	5	1
Medio \$10 – \$100 million 5 ONGs	4	1	3	2	2	5	5	0
Grande \$100 million to \$1 billion 5 ONGs	3	2	4	1	3	4	3	2
Totales	12	4	13	3	11	11	13	3

2. La auto-organización y entidades emergentes. Esperaba que ustedes iban a describir nuevas coaliciones, nuevas relaciones que las ONGs se han desarrollado durante sus experiencias con emergencias y desastres.
 - a. La cantidad de redes, alianzas, y coaliciones activas en desastres dan evidencia que el procese de organizarse tiene mucha vida. Algunas de las redes se habían convertido en ONG, como FOPRIDEH y ASONOG. Las 16 ONGs podrían nombrar por lo menos 12 alianzas que tenía alguna relación con proyectos de desastres o adopción al cambio de clima. Esta lista se hizo con lo que ustedes nombraron durante las entrevistas, no pretende ser completa.

Hay varias razones por que las ONGs se organizan en redes, alianzas y coaliciones:

- b. Desastres fomentan coordinación. Varias redes se formaban después del Huracán Mitch, un “desastre de desorganización.”
- c. Para extender el alcance de las ONGs. Ninguna organización puede alcanzar a todas las necesidades.
- d. Buscar especialistas. Todo el mundo tiene su especialidad, las ONGs buscan otras que saben hacer lo que ellas no conocen.

- e. La cooperación es bueno. Cooperar con otras es un valor que algunas tienen, incluyendo han puesto aumentar alianzas en su plan de trabajo institucional.
- f. Relaciones de sus sedes internacionales. Si las sedes internacionales tienen redes entre si, algunas oficinas hondureñas se han organizado en una red local de las mismas organizaciones.
- g. Incidencia. La mención más consistente de trabajar en conjunto era cuando hablaban de incidencia. Para poder efectuar incidencia efectivo se necesita un grupo de entidades.
- h. Apoyo emocional. Algunas de los entrevistados se expresaban como recibir apoyo emocional de su participación en redes.
- i. Red formada por financiadores. Algunas entidades que dan financiamiento piden que los que reciben los fondos formen una red.
- j. Fondos. Varias ONGs se juntan para solicitar fondos en forma conjunta. Contrariamente, solicitar fondos también es el raíz de la competencia que muchas veces las ONGs se sienten cuando tratan de ganar la atención de los que financian los proyectos.

Nombre de la red (No estoy seguro si capté bien todos los nombres)	Número de ONGIs entrevistadas que participan	Número de ONGs Hondureñas entrevistadas que participan
FOPRIDEH	6	3
Red Humanitaria	6	3
Alianza Interinstitucional para la Educación y Gestión de Riesgo	4	
Integral Alliance	4	
ASONOG	2	1
Un alianza no formal	2	1
ACI	1	1
ACT Alliance	1	1
Red de emergencia y gestión de riesgo	1	1
ROCCA	1	1
Comité Nacional para Incidencia de Gestión de Riesgo	1	
Alianza Hondureña ante el cambio climático	1	

3. También miré a los sitios de web para ver si el énfasis que las ONGs entrevistadas ponían en formar redes se veía en la presencia que las organizaciones mantenían en su sitio de web.
 - a. La mitad de las organizaciones tenía por lo menos una mención (excluyendo sus relaciones de financiamiento a ONGs mas pequeñas) de alianzas, algunas muy específicas como “trabajamos en alianza en nuestro trabajo con desastres o en nuestro trabajo de incidencia.”

Tamaño del presupuesto	Mención de alianzas	No mención de alianzas
Pequeño \$1 – \$10 million 6 Local NGOs	2	4
Medio \$10 – \$100 million 5 INGOs	4	1
Grande \$100 million to \$1 billion 5 INGOs	3	2

- b. En conclusión, a un observador de afuera del sistema de ONGs, parecía tantas las redes y alianzas que la confusión era como si no hubieran intentado auto-organizarse.
4. Comunicación e información. Esperaba descubrir que existiera canales de comunicación tanto formales como no formales que facilitara el flujo de información entre la ONGs.
 - a. ONGs tenían varios canales de comunicación que les servían para pasar información tanto formal como no formal.
 - b. El flujo de información dependía mucho en las relaciones personales. “Todos nos conocimos” fue una frase que se escuchaba varias veces en las entrevistas.
 - c. Por lo menos una persona pensó que relaciones no entraban en la comunicación entre ONGs.
 - d. Cuando habían fondos en medio de la interacción se redactaban acuerdos formales.
 - e. En los espacios de redes establecidas se compartían informes formales.
 - f. Las ONGs también reciben información de otras ONGs por sencilla observaciones.
 - g. La interacción entre organizaciones depende mucho en los directores.
 - h. El flujo de información no es consistente. ONGs pequeñas no tenían el mismo acceso a información, ni tenían las mismas relaciones.
 - i. También se investigaban los sitios de web y páginas de Facebook para ver si esos medios se usaba para facilitar la comunicación entre ONGs.

- i. Casi la mitad de las ONGs tenían su sitio de web solo en inglés, significando que no se usa el sitio para comunicarse con hondureños.
- 5. Normas. Esperaba encontrar normas que guiaran las relaciones entre ONGs.
 - a. Primeramente había una expectativa que las ONGs trabajaran juntas. Ninguna es una isla, fue una idea que varios expresaban.
 - b. El trabajo de desastre se divide, geográficamente, y también según su área de experiencia. ONGs generalmente no entran en comunidades donde hay presencia de otra ONG.
 - c. Eficiencia. Las ONGs intentan trabajar con lo más eficiencia posible. Cuando hay emergencias trabajan juntos porque los recursos siempre son escasos.
 - d. Confianza y transparencia. Había muchas expresiones de una esperanza que las otras ONGs se comportaran en una manera abierta que aumentara la confianza, algo necesario dado el rol fuerte de relaciones personales en la interacción entre ONGs.
 - e. Estándares. Algunas ONGs siguen los estándares del Proyecto Sphere o los de HAP, aunque esta norma no parecía consistente en todas las ONGs.
 - f. Normas formales. Todas las redes formales mantenían sus normas. Y siempre y cuando una alianza tenía fondos a su raíz se redactaban acuerdos escritos.
 - g. No abusar los privilegios. Las ONGs sabían que el estatus de ONG ha sido abusado por fenómenos como organizaciones de portfolio. Consideran que es un privilegio trabajar en Honduras. Una norma que esperan de todas era que no abusaran la oportunidad de llevar a cabo sus misiones en el país.
- 6. Aprendizajes, adaptaciones y evolución. Esperaba ver instancias donde las ONGs como grupo se ha aprendido y se ha cambiado su manera de actuar
 - a. La evidencia mas claro que el grupo de las ONGs aprende y se adapta es la énfasis que ponen en trabajar en conjunto hoy en día en comparación al pasado.
 - b. Huracán Mitch es como la línea de base para ver cómo se han cambiado el trabajo en emergencias. Muchas de ustedes podrían apuntar cambios que se habían hecho en los años después del Mitch.
 - c. Todos los talleres que se llevan a cabo tienen sus efectos en el trabajo de la ONGs, aunque para algunos a veces las soluciones sugeridas no son factibles poner en práctica por su costo u otra cosa.
 - d. Hay un reconocimiento que se puede aprender unas de otras.
 - e. Hay un reconocimiento que el mundo siempre se cambia y no hay que mantenerse con el mismo conocimiento.

7. Resultado agregado. Esperaba escuchar las ONGs hablar de un resultado en conjunto, un resultado que las ONGs han logrado, pero que no hubieron poder hacer trabajando solo.
 - a. Esto fue lo más difícil para que las ONGs expresara.
 - b. Otra vez vino la competencia y la búsqueda de fondos para prohibir que no pudieran ver los resultados de un conjunto de ONGs. Las ONGs parecen adueñarse de los resultados de los proyectos para poder ganarse mas fondos.
 - c. Es posible ver resultados en conjunto cuando se ve un objetivo mas grande que la meta del proyecto del día, por ejemplo adaptarse al cambio del clima requiere la fuerza de todas.
 - d. Un comentario propio: Creo que desde afuera se puede ver un resultado en conjunto mas fácilmente que desde adentro. En la dinámica de las ONGs hay que asegurarse la sobrevivencia de cada organización. Sin embargo se muestra un resultado mas grande cuando varias ONGs responden a un desastre, por ejemplo, y se comparten recursos materiales entre varias para distribuir en las zonas donde cada una está trabajando. En ese caso se puede mostrar que se ayudaron más personas que una sola ONG hubiera poder hecho trabajando solo.
8. Y en vista de que las ONGs tienen que relacionarse no solo con ONGs sino con el mundo exterior, también les hice una pregunta sobre sus relaciones con el gobierno.
 - a. Las relaciones con el gobierno son mixtas, tanto positivas como negativas. Muchas veces la misma persona expresaba las dos opiniones.
 - b. Las ONGs reciben fondos de una variedad de gobiernos, así que puede ser que ni el gobierno donante, ni el gobierno hondureña, ni la ONG misma están seguros a quien la ONG está más responsable.
 - c. Las ONGs ven que instancias como COPECO se están aumentando su capacidad y quieren exigir más coordinación de ellas, incluso parecen dispuestas generalmente a someterse a esa coordinación. Sin embargo hay una historia y expectativa de que las ONGs apoyarán al gobierno con fondos, creando así una tensión. En las relaciones convencionales los que dan fondos no se acostumbran a seguir el liderazgo a los que reciben los fondos. Así que la situación de las agencias oficiales y la habilidad de las ONGs de solicitar fondos crea una tensión inherente en las relaciones entre gobiernos y ONGs.

Estos son algunos de los resultados de las entrevistas que hice con ustedes. A mi me es claro que se puede ver al grupo de ONGs como un sistema complejo adaptivo. Y creo que se puede mejorar el trabajo, y las relaciones con agencias como COPECO si las ONGs se ven, y el gobierno también ve, al grupo de ONGs desde esa perspectiva.

Si las personas o agencias fuera del mundo de las ONGs pudieran interpretar cada ONG individual con todas sus idiosincrasias como parte de un sistema mas grande que al final lograra un resultado mas grande, quizá también se descubriría la capacidad de disminuir el nivel de frustración que yo he sentido en varios espacios cuando se habla del trabajo de las ONGs.

Y aunque sea desafiante, creo que si las ONGs como grupo pudieran verse a sí mismo como un sistema y a cada ONG individual como una entidad adentro del sistema, quizá pudieran seguir con la independencia que le es importante a cada organización, a la vez que pudieran también describirles a los de afuera un trabajo hecho por todo el conjunto de organizaciones, ayudándoles ver que las ONGs producen resultados. Puede parecer no tan organizado, puede ser no tan uniforme, no tan predecible como a un funcionario del gobierno o a un escritor de la prensa le gustaría, pero al final el trabajo se logrará hacer, un trabajo que ninguna ONG hubiera poder hacer solo.



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DATE: March 5, 2014

TO: Daryl Yoder-Bontrager
FROM: University of Delaware IRB

STUDY TITLE: [580898-1] Nongovernmental Organizations and Coordination

SUBMISSION TYPE: New Project

ACTION: APPROVED
APPROVAL DATE: March 5, 2014
EXPIRATION DATE: March 4, 2015
REVIEW TYPE: Expedited Review

REVIEW CATEGORY: Expedited review category # 6, 7

Thank you for your submission of New Project materials for this research study. The University of Delaware IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a study design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This submission has received Expedited Review based on the applicable federal regulation.

Please remember that informed consent is a process beginning with a description of the study and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the study via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the signed consent document.

Please note that any revision to previously approved materials must be approved by this office prior to initiation. Please use the appropriate revision forms for this procedure.

All SERIOUS and UNEXPECTED adverse events must be reported to this office. Please use the appropriate adverse event forms for this procedure. All sponsor reporting requirements should also be followed.

Please report all NON-COMPLIANCE issues or COMPLAINTS regarding this study to this office.

Please note that all research records must be retained for a minimum of three years.

Based on the risks, this project requires Continuing Review by this office on an annual basis. Please use the appropriate renewal forms for this procedure.

If you have any questions, please contact Nicole Farnese-McFarlane at (302) 831-1119 or nicolefm@udel.edu. Please include your study title and reference number in all correspondence with this office.

