INSTITUTIONALIZATION OF ANTI-CYBERHATE COORDINATION IN ONLINE COMMUNITIES: A CASE STUDY OF HAITI EARTHQUAKE EMERGENT RESPONSE GROUPS ON FACEBOOK

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Dedication

Dedicated to my parents
Late Mr. M. B. Subba "Kid Rio" and Mrs. Shashikala Subba.

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Abstract

To understand how emergent response groups institutionalize anti-cyberhate coordination, I conducted a longitudinal study using online data collected from two Facebook groups involving more than 700,000 members following the 2010 Haiti earthquake. Netnography, an ethnographic method to study the culture of online communities, was chosen to analyze coordination activities of netizens who joined hands to help earthquake victims. Using Scott's model of institutional elements and recent theoretical development in coordination theory, I retraced how institutional carriers emerge and evolve during the formation of anti-cyberhate mechanisms within self-emerging online collectives.

As it seems critical to bring social activists together, data analyses uncover four phases of institutionalization of online response groups. Haiti earthquake Facebook groups evolved from ad-hoc and improvised self-coordination to institutionalized self-governance. Initially, netizens engaged themselves in loosely coordinated actions to contain hatred messages, and eventually their coordinated action evolved into legitimate expectations, rules and values, and routinized monitoring and reporting. Moreover, evidences were found of institutional stickiness mediated by relational coordination. reinforcement of anti-cyberhate coordination was positive when members expressed shared goals and mutual respects, and when their problem-solving communications were frequent and accurate. However, institutional persistence of emergent responders was limited by a short-time horizon once spontaneous event-driven vested interest faded.

This dissertation highlights the importance of sustainability emergent response online groups in the wake of their usage in crisis responses in recent times. This dissertation is an initial step to build knowledge on institutionalization of emergent response online communities. It not only adds on the existing literature on online communities but also tries to fill the research gap on emergent response online communities for crisis response. This dissertation also has practical contributions for crisis responders to understand how emergent response online communities behave in its life cycle, which helps to understand them during four phases of crisis response.

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CHAPTER 1. INTRODUCTION

Open online communities, the on-line version of "Speaker's Corner", are electronic forums where Netizens from all over the world congregate with a cacophony of postings all trying to be heard. Open-membership, non-moderated, and lack of coordination and control are some characteristics of these communities from an organizational or institutional point of view. Assumptions are that open-access online communities are places of social breakdown full of harum-scarum. In spite of these assumptions the popularity of such open social networks are on the rise.

People around the world have different reasons to create their spaces in the virtual world. It manifests from personal blogs to technical domains of experts such as communities of practices. Online communities are not only created in times of calm and peace, but are also created in times of distress or crises. These communities are created for humanitarian purposes when a crisis strikes.

Some electronic forums are closed, structured, and regulated, whereas some are open, unstructured and unregulated. The first type is either supported by organizations or has resources including manpower, technology, finance and knowledge. When some undesired activities (e.g., flaming) occurs in closed online communities actors utilize these resources to curtail the undesired activities. The second type (open) online communities are self-emergent and created spontaneously by Netizens due to some antecedent events or interest. Even though such emergent response groups do not have pre-defined membership, tasks, and roles (Majchrzak, Jarvenpaa and Hollingshead, 2007), they are being utilized for crisis response particularly with the advent of social media. According to Stallings and Quarantelli (1985, p. 84), "…emergent groups can be thought of as private citizens who work together in pursuit of collective goals relevant to actual or potential disasters but whose organization has not yet become institutionalized". Thus indicating possibility of institutionalization of emergent groups. The initial observation in my sate study supports this notion.

These communities may lack resources unlike the first type, but are easy to create. Vaast and Davidson (2008, p. 3) posit that social media "have made it possible to broadcast opinions widely and at a very low cost" and so does Hoffman (2009, p.3) "the public and no-cost nature". Open communities have mushroomed over the years with the advent of social media and particularly social networking sites. The creators and supporters of these sites may have some specific purposes to help in crises, but not all the members agree on those purposes. Some members taking advantage of online disinhibition (Suler, 2004) flame, troll, rant or even post hate messages, which may threaten to hijack and diminish the objectives of the overall group purposes. The question is how do members of these open communities address such anti-social behaviors? How do they coordinate among themselves? What types of roles do they play? What relationships do they exhibit to control these behaviors?

Literature review suggests a few studies on online anti-social behaviors and ways to curtail them. However, most of these studies are on closed online communities where members have nominal functional roles. The nominal functional roles may serve their purposes but have limitations when role-playing members leave the group, thereby creating a role vacuum. Gould and Fernandez (1989) highlight relational roles and suggest five such roles for example, liaison, gatekeeper, coordinator, etc. for effective brokerage. Gittell (2002; and 2011) argues that

relational roles make organizations efficient. She emphasizes roles rather than functional activity, as it does not make a difference to organizational effectiveness even when actors in an organization come and go. This functional paradigm suits open online communities where members are in the hundreds, and different members even at different times can play the same role.

There are few studies on open self-emergent social networks that suggest cyberspace can instead be a copacetic social order. For example, one study found that online communities have centralized decision-making of governance as opposed to the assumed decentralized process (Herchuei, 2011). The recent trends suggest "an emerging user-centric control" (Hoffman, 2009). A preliminary study observed that members of such online communities exhibit self- organized governance rather than the assumed loose ad-hoc heckling coordination (Subba and Bui, 2012). This dissertation proposal intends to take the preliminary study one step further to analyze these communities by using the theoretical lens of institutional theory and relational coordination theory. Institutional theory helps to trace the emergence of coordination mechanisms as they manifest from patterns of organizational interactions in two Facebook groups as response to both external (e.g. Haiti earthquake) and internal environments (e. g. Cyberhatred attack), respectively. Use of institutional theory helps to identify causes, agents, and substantive changes over time in self-defense coordination against Cyberhate in online communities (Scott 2001). The theory of Relational Coordination is unique in identifying specific dimensions of relationships that are integral to the coordination of work (Gittell, 2012).

Knowledge gained from such studies is expected to help understand and control anti-social behavior (e.g., Cyberhate), particularly in crisis situations. Findings are expected to help us understand how these communities bring social order by institutionalizing inchoate collective interactions to coordinate self-governance for effective disaster management and humanitarian assistance.

1.1 Purpose of the Study

My initial observation indicated that members of online emergent response groups having non-binding and ad-hoc characteristics call for help, pray, and request to support. These behaviors are specific to emergent response groups. However once they felt threatened by inappropriate behaviors – postings of porn pictures or cyberhate postings - they started to regularize behaviors by posting rules or calling for norm compliance. The finding of the initial observation indicted presence of institutional elements like rules and SOPs even in emergent response groups.

The purpose of this study was to explore – using an institutional framework – how institutional pillars and carriers influence online communities, understood as informal, voluntary, ad-hoc organizations, in the reproduction of Anti-cyberhateMechanisms (ACHMs). This research investigated how institutional carriers – from rules and power systems to cognitive schemas and information technology – influence the ACH structure in online communities. The research studied a group of two online communities to understand how online Anti-cyberhate(ACH) members invoke a variety of institutional carriers in order to coordinate their initiatives to help victims, as well as engage in countering Cyberhaters.

The general goal of this research was to theorize the self-coordinated mechanisms of ACH efforts to obtain a better understanding of those key influences play a role in shaping the development of the ACH movement. My findings help

conceptualize the evolution of ad-hoc and improvised self-governance of non-binding loosely coupled online communities. They also help to explain how ACH practices take form in a social network – emerging from loose self-coordination to coordinated self-governance. This research also helps raise an important research issue of how, and under what conditions, Netizens decide to get involved without formally elected leaders or defined rules of engagement in a seemingly democratic forum.

1.2 Research Questions

My key research questions (RQ1&2) and supporting questions (Rq1.1, Rq1.2, Rq1.3 and Rq2.1) are:

RQ1: How do members of online communities practice or invoke a variety of institutional carriers –from rules, values, power systems, protocols to schemas and IT artifacts – to influence the online communities against Cyberhate?

Rq1.1: How do members of online communities practice or invoke *regulative institutional carriers* to influence the online communities against Cyberhate?

Rq1.2: How do members of online communities practice or invoke *normative institutional carriers* to influence the online communities against Cyberhate?

Rq1.3: How do members of online communities practice or invoke *cultural-cognitive institutional carriers* to influence the online communities against Cyberhate?

RQ2: How does Relational Coordination mediate the effects of the institutional practices on the online communities against Cyberhate?

1.3 Research Approach

This dissertation proposal employed a qualitative study approach to understand the ACH movement as a contemporary phenomenon, and also the trends, interactions and strategies of Cyberhaters and Anti-Cyberhaters. I adopted a case study because I must cover contextual conditions of ACHM, as it cannot be replicated in a clinical setting.

This dissertation is structured as follows: First, I highlighted the importance of online communities, defined them and raised issues particularly focused to institutionalization. Then, I discussed the literature survey on institutional theory and discussed its implementation on online communities, as it is particularly focused on coordination aspects. Gaps in the literature help conceptualize the framework, derived from informed by institutional theory (Scott, 2001), Relational Coordination Theory (Gittell, 2002), convergence behaviors and management control literatures. Using these frameworks my research questions were formulated. I tested these frameworks based on the data collected by using ethnography-on-the-Internet methodology called Netnography (Kozinets, 2010). The research questions were addressed through the

data collected on two social networking sites that were created on Facebook just after Haiti earthquake.

The names of the emergent response groups on Facebook are EARTHQUAKE HAITI and EARTHQUAKE HAITI APPEAL PLEASE JOIN EVERY CLICK WILL FEED A CHILD, INVITE! These are the two biggest social networks on Facebook, which were created immediately after the Haiti earthquake in 2010. Ten administrators managed the first group EARTHQUAKE HAITI – henceforth called as EQ1. Its highest membership was 315,938 recorded on 2/11/10. The second group EARTHQUAKE HAITI APPEAL PLEASE JOIN EVERY CLICK WILL FEED A CHILD, INVITE! – henceforth called as EQ2 – had one administrator. Its highest membership was 460,420 recorded on 10/10/10.

These sites were selected because a preliminary study revealed some interesting interactions and behaviors among members of these self-emerging online communities. The behaviors and patterns of behaviors were not observed in earlier studies and thus merit further study.

Data was collected from these two sites in order to analyze the phenomenon of loose coordination and coordinated self-governance. Downloading of Facebook postings was conducted and the data collection process ended when the number of messages drastically dropped, suggesting the withering of the debate interest on the Haiti quake. I did a review and filtered thousands of postings, and focused on those that seemed to suggest the complex nature of collaboration, coordination, organization and self-governance and institutionalization effort. The research illustrates how actors in spite of being not discussed by Scott's model see an institutionalized coordination structure as meaningful. The study explored how institutional carriers become sanctioned and legitimate mechanisms that influence the reproduction of institutionalized behavior in online environments in general and online communities in particular.

1.4 Operational Definition of Terms

Convergence behavior in crisis: It is defined as the informal, spontaneous movement of people, messages, and supplies toward the crisis area.

Coordination: Coordination is defined as "the act of managing interdependencies between activities performed to achieve a goal" (Malone and Crowston, 1990, p. 6).

Cyberhate: Cyberhate can be defined as any writings, pictures, or other electronically transmitted information that advocates violence against, separation from, defamation of, deception about, or hostility toward other people based upon race, religion, ethnicity, gender or sexual orientation.

Emergent Response Groups: Groups that are non-binding, open-membership, loosely coupled online communities.

Institutions: According to Scott (2008, p. 48) "institutions are comprised of regulative, normative and cultural-cognitive elements that, together with associated activities and resources, provide stability and meaning to social life".

Institutional elements: They are three pillars (regulative, normative and cultural-cognitive) of institutions.

Institutionalization: Institutionalization is defined as establishing something, typically a practice or activity as a convention or norm in an organization or culture.

Netizens: Netizens are Internet users from around the world who converge to social networking sites. In this study they are random, strangers to each other, geographically dispersed, and virtually anonymous.

Online Communities: An online community is a group of people – small or large – that converges on an electronic forum (for example social networking sites) through the Internet to interact with each other and build an online relationship.

1.5 Contributions of the Study

1.5.1 Contributions to the literature on crisis management and online emergent behaviors:

Online communities emerge in response to social needs (DeSanctis and Monge, 1999). Seminal paper of Fritz and Mathewson (1957) proposed five types of convergers during crisis. They are returnees, anxious, curious, helpers and exploiters. Recent studies indicate such behaviors are also found in online communities. Kendra and Watchendorf (2005) added two more convergers (Fan and Supporters). My examination of the coordination dynamics of emergent response groups through an institutional lens has implications for theorizing comprehensive dynamics of convergence roles.

My contribution is, an understanding of how role relationships influence institutional dynamics in online emergent response communities, offering a new direction of utilizing institutional theory on emergent response online communities that are considered ad-hoc. Furthermore, based on the institutional theory and relational coordination theory, my contribution lies in the modeling of ACH coordination as it explains anti-cyberhate responses and its implications on crisis management. Outcomes of this research help to propose ways to support ACH coordination in emergent groups.

1.5.2 Contribution to the institutional literature

According to Stallings and Quarantelli (1985, p. 84), "…emergent groups can be thought of as private citizens who work together in pursuit of collective goals relevant to actual or potential disasters but whose organization has not yet become institutionalized". This research is believed to be an unique empirical work which is able to demonstrate in clear evidence that emergent response groups may start as ad-hoc but evolves through different stages eventually institutionalizing its coordinating efforts.

The theoretical contribution is an expanded institutional framework to study online communities. The major contribution is an understanding of how role relationships influence institutional dynamics in non-binding online communities, offering a new direction in institutional theory vis-à-vis online communities. Furthermore, based on the institutional theory and relational coordination theory, my contribution lies in the modeling of ACH efforts as it explains ACH and its implications on disaster management. Outcomes of this research help to propose ways to support coordination of ACH efforts in non-binding online communities. In addition, it recommends policies and suggests how different ICTs can be utilized to create an appropriate environment to support online convergers during disasters.

1.5.3 Contribution to design science of online social platform

By looking at the effectiveness of coordination between emergent respondents, in particular that of administrators of social groups, this research suggest some design recommendations to platform providers such as Facebook and also to the creators of social groups such as anti-cyberhate alliance. In particular, by setting up rules and norms, or possibly using Webbots to control cyberhate on online spaces.

In addition, it recommends policies and suggests how different ICTs can be utilized to create an appropriate environment to support online convergers during disasters. My research sheds light on how these convergence behaviors can be exploited by emergent response entities. Technology platform providers, creators and Admins of online emergent response groups can focus on prominent institutional elements to effectively coordinate their crisis response roles. My research findings particularly in the context of relational coordination being a mediating factor for "institutional stickiness" may provide insights for ERG leaderships.

1.5.4 Design implications: Tailoring emergent leadership roles

The role that member play in ACH coordination needs to be modified in emergent response groups. Some members may have interest, enthusiasm, and knowledge to help meet the groups' goal. However due to technological constraint, they may not be able to contribute (Argote and McGrath, 1993) in creating public goods for the larger interest of public. For example, creator or Admin of group EQ2 did not contributed other than creating the group. It may have started as his/her self-interest but over a period of time members got involved in the group and started to feel it as their own. In the event of vandal attacks they felt helpless because neither Admin was working to remove the offenders nor the Facebook settings allow members to enforce. A voting system - a combination of active participation and recognition (by other members) enables Facebook members to "tailor their roles" (Majchrzak, Jarvenpaa and Hollingshead, 2007) to take charge of the system when needed. This is consistent with Alexander's recommendation to set up a process of "democratic consolidation" (2007).

In addition, knowledge gained from this research is expected to help law enforcement agencies to understand and help control emerging anti-social behaviors (e.g., Cyberhate) particularly in crisis situations.

1.6 Organization of the Document

This dissertation is organized as follows: In the next section, Chapter II, the importance of online communities is presented. Chapter III explains the theoretical and analytical framework and Chapter IV describes the methods used in this dissertation. Chapter V presents the analysis and findings. Chapter VI discusses the findings. The last chapter (Chapter VII) concludes the dissertation with suggestions for future research.

CHAPTER 2. IMPORTANCE OF ONLINE COMMUNITIES

2.1 Online Communities

There is no consensus among researchers on the definition of online communities or virtual communities even though Licklider and Taylor described it as early as in 1968. Some definitions are presented in Table 1.

Table 1 : Definitions of Online Communities

Definition	Study
"Virtual community is social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace. A virtual community is a group of people who may or may not meet one another face to face, and who exchange words and ideas through the mediation of computer bulletin boards and networks" (p. xx; and p. 58).	Rheingold (1993, and 1993a)
An online community is a "virtual social space where people come together to get and give information or support, to learn, or to find company" (p. 349).	Preece (2001)
"a cyberspace supported by computer-based information technology, centered upon communication and interaction of participants to generate member-driven contents, resulting in relationship being built up" (p. 51)	Lee, Vogel and Limayem (2003)
"An online community is defined as a large, collectivity of voluntary members whose primary goal is member and collective welfare, whose members share a common interest, experience, or conviction and positive regard for other members, and who interact with one another and contribute to the collectivity primarily over the Net." (pp. 1-2)	Sproull and Ariaga (2007)
Virtual community as an online group that has characteristics of common interest, rules, and voluntary membership and a boundary.	Hercheui (2011)
By "online communities" we mean any virtual space where people come together with others to converse, exchange information or other resources, lean, play, or just be with each other." (p. 1)	Kraut and Resnick (2012)

In this thesis I acknowledge the definitional difference between the various terms relating to communities, as in table 1, but use the term online, and virtual community interchangeably.

Based on the literature survey, the common denominators of online communities are a group of people who interact and build online relationships mediated by information and communication technologies. Online communities are electronic forums to share common interests between members, people (friends or strangers) to come together around a common cause, purpose, activity, and to share information.

Three typical characteristics of online groups (Kraut and Resnick, 2012):

1. anonymity
2. ease of entry and exit
3. textual communication

Typologies of online communities: The frameworks developed by Porter (2004), and Typaldos (2000) are useful to visualize different facets of online communities.

Porter's typology (2004) of online communities consists of purpose, place, platforms, population interaction structure, and profit model. One of the significant attributes of my study is population as a factor or pattern of interaction, which may evolve from weak to strong ties. An insight on the Haiti earthquake is presented based on Porter's model (Table 2).

Table 2: Typology of Online Communities

Attributes	Explanation	Example in Haiti case
Purpose (Content of Interaction)	Describes the specific focus of discourse, or focal content of communication, among community members.	Help Haiti earthquake victims
Place (Extent of Technology Mediation of Interaction)	Defines the location of interaction, where interaction occurs either completely virtually or only partially virtually.	Virtual interactions through Facebook walls, discussion forums, chats, emails, photos.
Platform (Design of Interaction)	Refers to the technical design of interaction: synchronous communication, asynchronous communication or both.	Both: Synchronous (posting and reposting on wall and discussion forums, photo albums). Asynchronous (message).
Population (Pattern of Interaction)	Refers to the pattern of interaction among community members as described by group structure (e.g. small group or network) and type of social ties (e.g. strong, weak, stressful).	Initially network and weak ties. Virtual publics, computer-supported social networks. Later communities and strong ties.
Profit Model (Return on Interaction)	Refers to whether a community creates tangible economic value (revenue-generation).	Studied groups are non-revenue generating forum. However return on the interaction could be effectiveness of controlling Cyberhate.

Source: Porter (2004)

Twelve principles of online communities developed by Typaldos (2000[1]) are given below. An insight on the Haiti earthquake is presented based on Typaldos's model (Table 3).

Table 3: Twelve Principles of Online Communities

12 Principles	Definition	Example in Haiti case
Purpose	We have a shared goal or interest.	To help earthquake victims.
Identity	We know who's who.	The Admins know each other.
Reputation	We recognize and build status based on our actions.	Give examples of actions that get attention. Anti-Cyberhaters are recognized by their postings.
Governance	We agree that our behavior can be regulated according to shared or stated values.	No offensive postings.
Communication	We have ways to share information and ideas.	Discussion forums, chat, wall, images.
Groups	We can relate to each other in smaller numbers.	Sub-groups in the large group.
Environment	We interact in a shared space that is appropriate to our goals.	Facebook group
Boundaries	We know who belongs and who does not.	Admins, Members and haters.
Trust	We know with whom we're dealing and that it's safe to do so.	Donate to Red Cross.
Exchange	We can trade knowledge, support, goods, services, and ideas.	Knowledge, sympathy, ideas, services.
Expression	We have a group identity and know what other members are doing. We can easily indicate our preferences and opinions.	Quake victim helper.
History	We can look back over our history and track our evolution.	Started as a small group and become the largest with more than 460,000 members.

Source: Typaldos (2000)

2.2 Life Cycle of Online Communities

Literature review suggests that online communities evolve through different stages of their life cycle. Tuckman's (1965) seminal findings as well as contemporary researches of Malhotra et al. (1997), Preece (2000), Andrews (2002), Wegner et al.

[1]http://www.fastcompany.com/41268/community-standards Last accessed on 04/18/14.

(2002), Kling and Courtright (2003), Iriberri and Leroy (2009) and Wang and Yu (2012). Refer Table 4 for different stages suggested by these researchers.

Table 4: Classification of Online Communities	
Phases	**Researchers**
Forming, Storming, Norming, Performing and Adjourning	B. W. Tuckman, 1965
Inception, Beginning of user involvement, Interactivity, and Growth	A. Malhotra, S. Gosain, and A Hars, A., 1997
Starting the online community, Encouraging early online interaction, and Moving to a self-sustained interactive environment	D. C. Andrews, 2002
Potential, Coalescing, Maturing, Stewardship, and Transformation	E. Wegner, R. McDermott, and W. Snyder, 2002
conception, adolescence, maturity	J. Owyang, 2008
Inception, Creation, Growth, Maturity, and Death	A. Iriberri and G. Leroy, 2009
Attraction, Build-up, Maintenance, Deterioration/End	X. Wang and Y. Yu, 2012

2.3 The Growing Importance of Online Communities

Virtual communities have evolved from small technical communities to open-to-all, ubiquitous, global phenomena ushered in by social network sites (Wenger, 2009). In the 1980's Kozinets (1999) estimated that over 40 million people would take part in online communities by 2000 AD. As envisioned by Hiltz and Turoff in 1978 computer supported communication is transforming our society with the emergence of one specific type of online community, i.e., social networking sites (e.g., Friendster, MySpace, HI5, Facebook). Friendster, founded in 2002, has more than 115 million registered members.[2] Similarly, Facebook, founded in 2004, alone had 1.23 billion monthly active users at the end of December 2013.[3] "If Facebook were a physical nation, it would now be the third-most populous on earth" (Economist, 2010[4]). And it may become the largest "country" on earth by 2016[5]. Such a large number of members of online communities represent a quantum leap from 2001 when just 90 million Americans (Horrigan, 2001) used online communities. Raverly (http://www.ravelry.com), claimed more than 1.2 million members as of March 2011 (Kraut and Resnick, 2012).

The proliferation of online communities in recent years has created a rich and

[2]http://www.molglobal.net/about-us/ Last accessed on 04/18/14.
[3]http://newsroom.fb.com/company-info/ Last accessed on 04/18/14.
[4]http://www.economist.com/node/16660401 Last accessed on 04/18/14.
[5] http://royal.pingdom.com/2013/02/05/facebook-2016/ Last accessed on 04/18/14.

complex online social environment. "[The] online world is a vibrant social universe where many Internet users enjoy serious and satisfying contact with online communities" (Horrigan, 2001). These environments have features like a group of people, their interactions and relationships mediated by information and communication technologies. According to boyd and Ellison (2007) these online communities allow one to construct a profile, make friends and see their connections. In essence they help create identities (boyd, 2006). On Facebook one can create a profile, make friends, reconnect with others, upload photos and videos, chat, create discussion forums, and join causes and groups.

Such online communities are not limited to what they were initially envisioned for. For example, members of these communities are not only limited to staying in touch with family and friends but also may express, communicate, share, collaborate, debate and reflect. Activities in such communities are not only limited to updating personal status, writing short stories and sharing experiences about daily life, but are transcending toward encompassing other activities, including disaster and crisis response. In recent crises, Facebook provided a platform for disaster survivors, victims, helpers and others to play a role in emergency response, humanitarian assistance and disaster relief efforts (Palen, Hiltz, and Liu, 2007; Hughes, Palen, Sutton, Liu, and Vieweg, 2008; and Subba and Bui, 2010a,b). Such social networking sites are "digital habitats" (Wenger et. al, 2009) where the information, resources and users, during and after crisis converge online.

Types of online communities participation: According to Fisher, Unruh and Durrance (2003) there are two basic types of roles in any online community (1) information providers and (2) information users. Actors give and take information in the form of texts (postings), images (photos), hypertext links etc. There are several studies that typify the online participation or behaviors as give in the following table (Table 5).

Table 5: Types of Online Communities Participation

Types of Participation	Authors
Visitor, Novice, Regular, Leader, Elder	Kim (2000)
Newbie, Celebrity, Elder, Lurker, Flamer, Troll, Ranter	Golder (2003)
Answer Person, the Questioner, the Troll, the Spammer, the Binary Poster, the Flame Warrior, and the Conversationalist.	Turner, Fisher, Smith, and Welser (2005)
Reader "lurker", editor, contributor, monitor or caretaker "watchdog", arbitrator "mediator", administrator, creator or manager, welcoming committee, meta users.	Bryant, Forte, Bruckman (2005)
Visitor, novice, active, leader, troll, passive	A. C. Sonnenbichler (2010)
Newbies, Minglers, Devotees, Insider, Lurker, Interactor, Maker, Networker	Kozinets (2010)

2.4 Issues Related to Online Communities

2.4.1 Online communities and cyberhate

Virtual communities have the potential to empower their users (Wellman and Gulai, 1997), help activism (Schwartz, 1996 and Rheingold, 1999), act as a kernel of a new business model (Hagel and Armstrong, 1997), foster business relationships (Kozinets, 1999), give universal access (Preece, 2003), and help political campaigns (Robertson, 2010). However, some studies show that online communities have anti-social incidents like rape on Cyberspace (Dibbell, 1993), anomie (Fernback & Thompsonor, 1995), Internet deviancy (Berg, 2001 and Bocij and MacFarlane, 2003) and Cyberhate (Douglas, Mcgarty, Bliuc and Lala, 2005; Craig-Henderson, 2006).

Just a few years ago, such un-social online behaviors were limited to emails, mailing lists and chat rooms, but, now, it is an epidemic through social media and social networking sites. "In conjunction with the globalization of technology there has been a notable increase of Cyberhate related activities on the Internet" (Perry & Olsson, 2009a, p. 187). In 2010, the Simon Wiesenthal Center (SWC), found a 20 percent increase in the number of hate and terrorist-abetting Web sites, social network pages, chat forums and micro-bloggers over the last year, to a total of 11,500.[6] The SWC reported in 2013 that it is tracking more than 20,000 hate and terror-related sites, social network pages, forums – up 30% from 15,000 in 2012[7].

Implications of Cyberhate: Cyberhate incites hatred and promotes harmful action against racial, ethnic, religious, political, and sexual or gender minorities (Murphy, 2001). Cyberhaters are using the Internet to promote their ideologies (Lee and Leets, 2002), expand their influence, collaborate with each other, recruit and train new members (Belluck, 1999; Perry, 2003; Marriot, 1999). Children and young people are most vulnerable to bigotry messages and hate rhetoric (Tiven, 2003). With the rise of terrorism, online forums are being used to inspire terrorist activities, teach how to make bombs, provide list of targets (Anti-Defamation League [ADL], 2001) and advocacy of terrorism (Ballard, Hornik, & McKenzie, 2002; Stanton, 2002). Craig-Henderson (2006, p. 31) summarizes that "terrorists, members of organized hate groups, as well as individual anarchists and technologically savvy social outcasts have relied upon the ease and anonymity of the Internet to disseminate harmful, threatening and hate filled messages". Also, concerns are being raised that Cyberhate may lead to violations of human rights (Perry & Olsson, 2009b; United Nations, 2009[8]).

Anti-social behavior like Cyberhate is visible during disasters in the cyber world in contrast to non-visibility of hatred behaviors during disasters in the physical world. "The possibility of being anonymous when harassing or expressing hatred against individuals or groups has made it easier to continue their unlawful or disrespectful online activities" (Perry & Olsson, 2009a, p. 195). For example, Cyberhate may be committed anonymously sitting behind a computer by an individual or by groups and the offenders and victims could be geographically miles apart (Shinder, 2002). Members of online community have different interests. "The challenge here are to deter inappropriate behavior by group members, prevent trolls

[6] http://www.wiesenthal.com/site/apps/s/content.asp?c=lsKWLbPJLnF&b=4442915&ct=8101639 Last accessed on 04/18/14.

[7] http://www.wiesenthal.com/site/apps/s/content.asp?c=lsKWLbPJLnF&b=4442915&ct=13128625#.U1co4dw84xs Last accessed on 04/18/14.

[8] http://www.un.int/wcm/content/lang/en/pid/9842 Last accessed on 04/18/14.

and other outside attackers, and limit the damage that is caused when inappropriate behavior occurs" (Kraut and Resnick, 2012, p. 5).

The implications of Cyberhate behavior could be expected to multiply during a disaster response. For example, offended members of a online help group may leave the group without helping the victims, or they could become involved in heated discussions to the dismay of other members, who may not be part of the debate – the group thereby becoming ineffective in their assistance or may as a group vehemently attempt to counter Anti-Cyberhatred behaviors, rather than using time to help. Offended people of either group may then get involved in nefarious activities that may hamper the disaster management. Such chaotic situations could negatively affect the disaster response and prevent real humanitarian assistance. Therefore, understanding how to control Cyberhate during crisis situations is an important issue for management of disaster events in modern times. Thus, research on online communities, particularly self-emerging online communities becomes imperative.

2.4.2 Online communities and institutionalization

The term "institutionalization" refers to the process of embedding something (for example an idea, a concept, a role, a value or mode of behavior) within an organization, social system, or society as a whole. Selznick (1992, p. 232) contends, "Institutionalization is the emergence of orderly, stable, social integrating patterns out of unstable, loosely organized, or narrowly technical activities". Such patterns of behaviors was observed in a preliminary study (Subba and Bui, 2012) when Netizens initially engaged in loosely coordinated actions to contain hatred messages, but eventually evolved into an orderly "group" to coordinate their ACH efforts.

Online communities supported by organizations have specification of a clear structure (Kaiser, Tullar, and McKowen, 2000), shared norms (Sarker, Lau, and Sahay, 2001), organized processes (Bell and Kozlowski, 2002), and goals, norms and identities (Joseph, Lid, and Suthers, 2007). However, individuals also create online communities to meet their specific interests. These self-emerging online communities lack the resources and support that institutionalized online communities get. From an organizational or institutional point of view, voluntary, open-membership (Chen, Cheng, and Liu, 2008), non-moderated (Sachakman, 2011), lack of coordination and control (Zittrain, 2008), and sustainable issues (Thomas and Botha, 2010) are some of the characteristics of these communities. Cultural differences are common in global online communities, leading to difficult coordination (Johansson, Dittrich and Juustila, 1999), and hindering communication (Sarker & Sahay, 2002).

There are three studies, which focus primarily on understanding the influence of institutions on online communities. Matzat (2004) studied 50 research online communities and found that if members have strong offline relationships (institutionalized) then their norms of helping other members online is also strong. de Souza et al. (2004) contends ICT tools like groupware mediate the institutionalization of governance mechanisms in online communities. First they collected data from 20 Brazilian respondents with routine experience with face-to-face groups. However on the second part the researchers hypothetically studied these respondents' online behaviors. They postulated that the informal face-to-face groups if migrate online they create forms of social structures because the groupware introduces additional norms and rules. Hercheui (2009) investigated four Brazilian environmental educational groups and found that they have two system of governance: 1) democratic system of governance between themselves; (2) centralized decision making in regard to sponsors.

Three-literature reviews (Powell, Piccoli, and Ives, 2004; Lee, Vogel and Limayem, 2003; and Hercheui, 2011) point of study on institutionalization of online communities as uncharted, but a significant area of research. Hercheui (2011, p. 14) puts it aptly as a concern regarding their "capacity to succeed in the long-term as collectives". Such concerns amplify when online communities mediated by technologies are evolving out of self-emergent behaviors of Netizens. For example, recent trends show not only organizations, but also even individuals are mobilizing new media such as social media and social networking sites (Subba and Bui, 2012). The challenge is to sustain those online communities that are created with some specific purposes.

Much of the literature on coordination and governance has focused on online teams, and members of these teams typically belong to an organization (e.g., employees of a geographically dispersed organization), or they are bound by a well-defined contractual arrangement, likely one with highly structured and well-articulated standard operating procedures (Powell, Piccoli and Ives, 2004). Online collectives are always evolving (Feenberg and Bakardjieva, 2004) which implies that more research is needed to understand them. Some of the questions raised in this research are: What happens when actors are in widely distributed ephemeral non-binding online communities who interact through Social networking sites? How do they institutionalize their organization to sustain their group objectives in the long run? How does the institutional environment influence governance structures and how is decision-making reproduced in such an organization? How do institutional carriers, including IT artifacts, influence these online environments?

2.4.3 Online communities and relational coordination

Literature review suggests that many of the study of online communities examine nominal functions and do not explain relation dimensions. For example, an actor who posts a lot of news articles or advertisements is an example of a high-frequency poster who serves no social role at all, just a social function (Golder, 2003). I am interested in exploring online roles with relationships from the institutional perspectives because these roles facilitate communication and coordination to meet organizational goals (Fernandez and Gould, 1994). In a study of relationship between actors in social networks, Gould and Fernandez (1989) argue that actors occupy five types of social roles with relationships: Liaison, Representative, Gatekeeper, Cosmopolitan or Itinerant, and Coordinator. These types define whether the relation is completely internal to the group or external to the group or between sub-groups. Kim and Rhee (2010) highlight the effects of social networks, which may depend on the specifics of a relationship.

According to Gittell (2002), relational coordination is about roles of the participants when they are coordinating together. From the relational coordination perspective having interdependence with communication, control and coordination activities some roles are topics of interest. These are liaison, gatekeeper, coordinator, leader, celebrity, and maker (Table 6).

Table 6: Examples of Relational Roles

Types of relationships	Definition
Liaison/Coordinator	Actor's role is to link distinct groups without

	having prior allegiance to either. Coordinates with different entities in the community.
Gatekeeper/Networker	Establish contact with outside communities. Members of communities trying to reach into a particular community to build ties and relationship to exchange ideas.
Maker	High social and consumption focused skills and connections. Builders of the community.
Celebrity/Elder	They are prolific posters who spend a great deal of time and energy contributing to their newsgroup's community. They display high communicative competence and share much common ground with the community.
Leaders	Help new comers, help operate the community, take lead in different activities.
Devotees	Maintain a focal interest in and enthusiasm for the consumption activity in the community, as well as refined skill and knowledge sets.
Insiders	They have strong social ties to the online community as well as deep identification with, aptitude in, and understanding of the core consumption activity.
Source: Gould and Fernandez (1989), Kim (2000), Golder (2003), and Kozinets (2010)	

These Netizens come from different parts of the world and unknown to each other. The question is how members of online communities who are loosely coupled individuals coordinate to address their problem. Moreover, challenge for members of non-binding online groups to build a relationship and work as per their roles may be an uphill task. The issue is to understand how actors in such environment successfully play their relational roles.

CHAPTER 3. THEORETICAL AND ANALYTICAL FRAMEWORKS

The study of self-emerging online communities covers a wide-range of social phenomena: emergence of Netizens who interact through massive information exchange, post messages of sympathy or support or hate, the "in-groups (us) versus out-groups (them)" phenomena. In the process, some Netizens could become de facto defenders or protectors of the victims of online hatred behaviors. They identify themselves with the online groups that align with their beliefs and attitudes, set up self-mediated actions to counter the Cyberhate movement through policing and reporting, and eventually, and by necessity, come together to institutionalize their response effort. Given these diverse paradigms, it should not be surprising that any single theoretical lens would have difficulty in providing sufficient and satisfactory explanatory firepower.

There are many different disciplines that could apply to my research. It is an interdisciplinary research effort and encompasses various domains; including disaster convergence behavior and management, organizational behavior particularly focused on coordination, and institutional dimensions in online communities including social networking sites, and controlling of anti-social behaviors with emphasis on Cyberhate. I have focused my literature reviews on studies to the above-mentioned domains particularly from institutional dimensions, i.e., regulative, normative and cultural-cognitive pillars of institutions. I have reviewed institutional paradigm, coordination, and control aspects in online communities. In addition, my literature review focuses on convergence behaviors, its recent trends and implications on disaster management.

I examined how the three pillars and carriers of institutions affect online communities vis-à-vis efforts to curb online nuisance. Moreover, relational coordination has been studied emphasizing the relationship of roles in online communities through pillars and carriers of institutions. I did a "mapping" between institutional carriers and elements of relation coordination to explore whether relationships mediate coordination to control of Cyberhate. This helped me fill the gap as well as help build the theoretical framework for data analysis.

The following table (Table 7) provides a summary of the theories and approaches related to this research. Convergence behavior model, Control model, Institutional theory, and Coordination theory are used to assist my discussion leading to data analysis. Scott's institutional model and relational coordination theory will provide a helpful background that assist in the understanding of the analytic tools employed directly by this study.

Table 7: Summary of the Theories and Approaches Related to this Research

Theory/ Field	Background/ Domain	Main Concepts	Strengths	Limitations related to this study

Background Material – Explanatory Concepts				
Convergence Behavior Model	Disaster management	Actors People's behavior in crisis	Identification of different behaviors or roles. Eight roles are identified. Helps explain possible new online behaviors.	Limited to virtual world.
Control Response	Control management	Controlling behaviors Institutional legitimization	Helps understand how society invokes various – authoritative or democratic-control mechanisms.	Control in virtual world has its own limitations due to geographi-cal proximity and users anonymity.
Institutional Theory	Organizational studies	Institutional environment Institutional actors, actions and roles Governance	Understanding of institutionali-zation	Wide scope in theoretical concept that cannot be covered in this study. Scott's model fits.
Coordinatio n Theory	Function of Management	Harmonize all activities	Foundation of relational coordination. Formation of control.	No priority to relational roles.
Analytical Approaches Adopted for this Research				
Scott Model	Institutionalism	Pillars: Regulative, Normative, Cultural-cognitive Carriers: Symbolic systems, Relational systems, Routines, Artifacts	A Proposed Theoretical Framework for institutionalization of online communities (below)	
Relational Coordinatio	Roles of members	Relationship of: shared goals		

n		Shared knowledge Mutual respect Communication of: Frequent Com Timely Com Accurate Com Problem solving Com	
Source: Palen et al. (2007); Hughes, Palen, Sutton, Liu, & Vieweg (2008); Subba and Bui, 2010a & 2012; Fayol (1916 &1949); Follet (1940); March and Simon (1958): Malone and Crowston, 1990); Ross (1896); Dowd (1936); Fritz and Mathewson (1957); Scott (2001, 2008); and Gittell (2002, 2011).			

3.1 Institutional Theory

"Institutional theory is principally concerned with examining the ways in which belief and rule systems affect social behavior and structure" (Scott, Ruef, Mendel, and Caronna, 2000). Based on Scott's (2001) definition of institution we can say that online communities are institutions, which are composed of regulative, normative and cultural-cognitive elements that produce meaning, stability and order. Furthermore, institutional elements move from place to place and time to time with the help of four types of carriers - symbolic systems, relational systems, routines, and artifacts (Scott, 2003).

Institutionalization: Herein, I present some literature I have found relevant to my study. Different researchers give importance to different mechanisms leading to institutionalization. Berger and Luckman's (1966), seminal work on "social construction of reality" is considered as an early source of much of modern institutional theory (Scott, 2001). According to Berger and Luckman (1966) social reality is a human construction created through interaction. Institutionalization occurs whenever there is a reciprocal typification of habitualized actions by types of actors (Berger and Luckmann, 1966, p. 51). "Habitualized action refers to behaviors that have been developed empirically and adopted by an actor or set of actors in order to solve a recurring problem" (Tolbert and Zucker, 1996, p180). In other words, institutionalization takes place when any habitualized patterned action, such as coordinated ACH efforts, is reproduced again and again and is shared and taken for granted by all the members of the online group being studied. DiMaggio and Powell (1983) proposed coercive, normative, and mimetic processes of reproduction. Reproduced habitualized patterned actions are institutions (Jepperson, 1991), that control human behaviors by creating a pattern of conduct (Berger and Luckmann, 1966), and are associated with particular actors (Tolbert and Zucker, 1996, p 232). Selznick (1992, p232) contends, "institutionalization is the emergence of orderly, stable, social integrating patterns out of stable, loosely organized, or narrowly technical activities". Such patterns of behaviors were observed on a preliminary study (Subba and Bui, 2012) when Netizens initially engaged in loosely coordinated actions to contain hatred messages, eventually evolved into an orderly "group" to coordinate their anti-cyberhateefforts but in a rather unstable environment. Some earlier studies

explored elements of organizational domain like norms and rule. Lessig (1999) shows how institutions of self-regulation emerge in online environments such as America Online and LambdaMOO to constrain hate speech through social norms – normative constraints self-forced by members of the online communities. Ren, Kraut, and Kiesler (2007) suggest using clear rules of management and definitive boundaries of discussions are good organizational practices in online communities. Study of virtual environments based on institutional theory is very few, but one of them is Hercheui (2011) who studied four Brazilian environmental education virtual communities and find that these communities reproduce centralized decision-making.

The research interest of my case study is the creation and sustaining of coordination as a pattern of interaction in informal structures (for example online communities) as opposed to formal structures that are sources of coordination and control (Meyer and Rowen, 1977).

Institutional environments: According to Scott (2001), the institutional environment is composed of regulative, normative, and cultural-cognitive structures that operate to provide coherence, meaning, and stability to a online community. There are three institutional components: (1) institutional logic, (2) institutional actors, and (3) governance systems that help to understand changing nature of the institutional environment of online communities (Scott et. al., 2000). Institutional logics (i.e. the belief systems) "specify what goals or values are to be pursued within a field and indicate what means for pursuing them as appropriate" (Scott et. al, 2000, p. 171). In other words, shared understanding or shared knowledge guide participant activities in a online community. Institutional actors are carriers and creators of institutional logics, and actors possess identities, capacities, responsibilities, and rights related to the online communities (Scott et. al., 2000). Governance systems support regularized control either through regimens (mutual agreements) or legitimate authority or non-legitimate coercive means (Scott et. al., 2000). According to Streeck and Schmitter (1985) there are four types of governance structures: (1) community model – spontaneous solidarity, (2) market model – dispersed competition, (3) state model- hierarchical control, and (4) association model – coordination and control.

Different fields may have different types of governance systems. Online communities have characteristics of spontaneity and solidarity as a community. The associative model of governance having coordination and control may help in understanding the institutionalization of online communities. In my case study, actors such as Admins and Members control the activities in online communities by utilizing regulative, normative, and cultural-cognitive structures. They help to construct frameworks that provide much of the foundation for the stable conduct of anti-cyberhatepractices (Scott et. al, 2000). These actors and their beliefs interact in the online communities to create governance structure (Sewell, 1992). At the incipient stage of a new social movement, i.e., helping crisis victims or encouraging anti-Cyberhate, shared understanding may be at the lowest end, but as the movement moves to a coalescence stage institutional actors utilize different governance structures to create shared understandings and order (Mauss, 1975). Then diffusion of anti-cyberhatemechanisms, as a standardized pattern, institutionalize in these online communities (Perry and Pugh, 1978). However, as noted by Giddens (1984), these structures may empower or constrain actors and their actions in the online communities.

3.2 Coordination

The etymology of the word "coordination" is rooted in the Latin words Co- (together) and Ordinare (Order, arrangement) meaning to place (arrange) in order. In our contemporary world, Henri Fayol (1916/1949) was the first known author to record "coordination" as one of the five functions of management in organizations. He postulated that "to coordinate is to harmonize all the activities of a concern so as to facilitate its working and its success" (Fayol, 1916/1949, p. 103[9]). To him, communication (conference) between different entities in an organization is one of the prime mechanisms to achieve effective coordination. Fayol's theory of management is humanistic in nature. However, researchers like Follet (1940) and March and Simon (1958) see coordination as a self-generating activity. For Follett (1940, p. 300) "coordination is a process of auto-governed activity" and presented four fundamental principles of organization as (Follett, 1940, p. 297):

- Principles of direct contact: Coordination by direct contact of the responsible people concerned.
- Principles of early stages: Coordination in the early stages.
- Principles of self-adjusting: Coordination as the reciprocal relating of all the factors in a situation.
- Coordination as a continuing process.

According to Follett (1940), the implication of these three principles in organizations is the formation of control as a horizontal process. For example, in my case study, a horizontal control between different groups of an ACH movement, and again the same kind of control between different leaders of an ACHM group. This would generate a continuous active self-generating coordination (control) process. One of the propositions of this research is that control can be achieved through coordination (from coordination to control), which will avoid implementation of harsh regulative control mechanisms.

March and Simon (1958) categorize two types of coordination: coordination by plan (coordination based on pre-established rules), and coordination by feedback (coordination that involves transmission of new information). The first one is effective when the situation is stable and predictable, whereas the second one is suitable when the situation is variable, volatile, and unpredictable.

Coordination is central to social order (Schelling, 1960; and Lindblom, 1977). When a crisis occurs in a community, it is likely that some members of this community will take action immediately and without organization when they coordinate with each other. Researchers in relational coordination theory (e.g., Follett, 1949) conceptualize coordination as a process that occurs through a network of tasks and communications. Gittell (2006) expands this theory in arguing that in a relational coordination, participants share some common goals that allow them to join forces, share knowledge that helps relate and coordinate tasks, and foster mutual respect to overcome barriers. Participants do not need to know or to like each other. Coordination could be spontaneous at the beginning but may become institutionalized (Harding, 2008). It is the role that each assumes that links them and enables them to work together toward their mutual goal. Malone and Crowston (1990) argue that there are interdependencies between goal-seeking relationships and the activities. "Coordination is the act of managing interdependencies between activities performed to achieve a goal" (Malone and Crowston, 1990, p. 6). There are these types of coordination needs: actors, tasks and shared goals (Malone, 1988).

[9] English translation of original work in French in 1916.

3.3 Convergence Behaviors in Crisis

Convergence behavior – a spontaneous and massive movement of people, messages and assets toward the disaster-struck area – was first studied by a seminal work of Fritz and Matthewson (1957). With the advent of new communication and information technologies, the physical conversance behaviors are found to occur in the cyberspace as well (Palen et al, 2007, Huges et al, 2008 and Subba and Bui, 2010b). Managing crisis situations has always been a challenge for people involved in humanitarian assistance and disaster relief. This is because the broken social order during a crisis hinders rescue and relief operations, as well as impedes restoration of a normal social life. In addition, convergence occurs towards the disaster zone. Fritz and Mathewson (1957) posit that people, resources and information come together during natural disasters, which is widely recognized as a source of possible problems by disaster responders. Controlling convergence during crisis situations, for various purposes including controlling crime, is a daunting task for disaster responders such as police, FEMA, and other governmental and non-governmental agencies. Dynes, Quarantelli & Kreps (1981) discuss how the deployment of security and law enforcement personnel on the ground contribute to their visible presence to the public, which in turn may help in preventing crimes. Then, a question raised is what happens in cyberspace where such preventive measures may not be visible. How may disaster responders address challenges if anti-social behaviors occur online?

Studies show contradictory results concering anti-social behaviors during crisis. Some researchers argue that people generally exhibit controlled behavior and refrain themselves from anti-social or deviant behavior during natural disasters. Quarantelli (1965) argues that human beings act in a controlled way, and looting and anti-social behaviors are rare during disasters (Quatantelli & Dynes, 1977; Alexander, 1993). Similarly, Drabek (1968) states that people's behavior does not change in an instant simply because of disasters. His arguments are based on regulative, normative and cultural aspects of the institutional paradigm (specifically morals, respect for laws, and customs). However, researchers including Fritz & Mathewson (1957), Wenger (1975) and Kendra & Wachtendorf (2003) argue that during disasters, people show antisocial behaviors such as looting and exploitation. Moreover, with the advent of new information and communication technologies, anti-social behaviors are no longer limited to geographical proximity. Parallel behaviors can be observed in cyberspace (Palen et al., 2007; Hughes, Palen, Sutton, Liu, & Vieweg, 2008, Subba and Bui, 2010a & 2012). The first two groups of researchers observed anti-social behaviors like exploitation and scams in the online communities they studied. The last groups of researchers are more focused on addressing curbing such anti-social behaviors. Table 8 depicts convergence behaviors in cyberspace (Subba and Bui, 2010b, p. 5).

Table 8: Convergence Behaviors in Virtual Worlds

Types of Convergence Behaviors	Descriptions	Examples in virtual world
Returnees	Returnees as the disaster survivors who have left or who have been	Posted messages to check their homes, properties and even pets

	evacuated from the disaster area and "substitute" returnees (relatives and friends of disaster victims) who wish to return to assess losses, and to retrieve, guard, and salvage their property.	they left behind. Imagery service provider like Digital Globe provided satellite imagery of disaster site to give an idea of "returnees" neighborhoods.
Anxious	The anxious are outside of the impact zone but have relatives and friends in and around the impact zone. They can be anxious close-associates or generally anxious. The former have closer ties with the missing family members and later have not lost a family member but are worried.	Visit cyberspace to know about missing people, refugee centers, shelters, and medical support.
Helpers	The helpers come forward to help disaster victims and are of two types: formal help convergers (official organizations and staffs) and informal help convergers (volunteers).	People helped locate websites that have information like mission people. Utilized Wikis and Flicker for texts and images. Informed about looting and scammers. Google Maps and Google Earth provided images. NOLA.Com played a crucial role in providing Katrina related information on its forums and blogs. During first two weeks, NOLA.com posted hundreds of crisis emails it received.
Curious	The curious have minimal personal concerns with the disaster victims but converge to the impacted zone to sightsee the destruction and activities around the area.	Google Earth provides disaster site images and use flicker.com to see pictures of the destruction.
Exploiters	The exploiters converge to take advantage of disaster events for their personal gains.	Online scammers. Malicious websites. Spammers used fake news clippings with links to websites to dupe with donation money. Airkatrina.com, the case of the phony pilot.
Fans (or Supporters)	Individuals or group of people encourage and express gratitude to emergency and relief workers.	Wrote on blogs about good work of Red Cross, the Helpers and others.

Mourners (and Memorializers)	People mourn the dead as well as created memorials.	Several websites mushroomed to cater the need of people to pay homage and tribute online.
Detectives	Convergers perform surveillance activity to enhance information management among authorities and the private sector, to serve and protect the public, deter criminal, and report and/or respond to suspicious activities.	Aircraft captured hundreds of high-resolution images as Hurricane Katrina and used by National Geospatial-Intelligence Agency. Companies like Sophos.com watched the cyberspace and informed about malicious spams and websites. The FBI, National White Collar Crime Center, Internet Crime Complaint Center (IC3) versus airkatrina.com, alleged exploiters.
Source: Subba and Bui (2010b, p. 5)		

3.4 Control Response

In his seminal article, a century ago, Ross (1896, p. 519) wrote, “control is, like sustentation or defense, a function that must be continually exercised in order that society may live at all” (Ross 1896, p. 521). Control could be either authoritative or democratic (Dowd, 1936). In other words, control is like a double-edge sword. “On the one hand control is exogenous, imposed through tools, techniques, structures and on the other hand control is endogenous, communicative, and shared through language, commonality and self-regulation” (Mulgan, 1991, p. 4). Such two-sided characteristics may cause confusion at the beginning, but it also offers an operational tool to visualize the phenomenon being studied in this case study. I studied how members of two particular online communities in two social networking sites invoke different institutional techniques, institutional structures, and institutional tools to coordinate their actions to help victims as well as coordinate their efforts against Cyberhate. Such a demonstration helped me understand how shared commonality between members would bring self-regulation self-governance in these online communities. Findings may help disaster responders with the capacity to reason and plan ahead as suggested by Fritz and Mathewson (1957). More than half a century ago Fritz and Mathewson (1957, p. 90) contended, "Past techniques of control usually have been based upon improvised post-disaster judgments, rather than upon orderly implementation of pre-disaster plans."

Fritz and Mathewson (1957) and (Koops, Lips, Prins, & Schellekens, 2006) adopt regulative mechanism to control convergence, whereas Dowd (1936) and Sumner (1907) emphasize normative and cultural-cognitive pillars of institution. Dowd (1936) suggested that community members - individual, or group of individuals - decide and act when a crisis arises in a community. Control can be achieved through exercise of authority that induces folkways and mores in a group

(Dowd, 1936) and group norms that make members comply. *Folkways and mores* consist of shared understandings about behavior of each member in a group where group members may approve, disapprove, tolerate or sanction, within particular contexts (Sumner, 1907). Some researchers explain control systems in terms of technological concepts. A control system is a device or set of devices that manage the behavior of other devices (Cangussu, Miller, Cai, & Mathur, 2009) and has four components: observer, evaluator, effector, and communication network (Anthony, Dearden & Bedford, 1984).

Traditionally, laws and legal institutions are based on customs, traditions, geographic boundaries and physical space (Arthurs & Kreklewich, 1996). However, "the rapid technological and social changes along with the globalization of digital communication and media have produced socio-technological/legal dilemmas that are difficult to handle" (Perry & Olsson, 2009a, p. 196). Therefore in recent years, many developed nations and organizations have attempted to respond to Cyberhate through legal regulations and policy formulations (Vysotsky, 2003). Civil societies are the flag bearer against intolerance and discrimination (OSCE/ODIHR and Wessler, 2009). Civil societies have two major roles to play to address policy issues related to Cyberhate: (1) triggering legal action; and (2) educating the public (Bailey, 2006). Civil societies can explore available legal avenues including human rights violations, libel actions (Goldschmid, 2000), lodge complains for criminal investigation, and invoke civil code. Civil society groups such as Anti-Defamation League (ADL), Southern Poverty Law Center (SPLC), and Simon Wiesenthal Center (SWC) are educating the public against Cyberhate phenomenon. International organization like the United Nations have started to put Cyberhate issues on its agenda, which intends to explore the impact of hate-related discourse on the Internet and ways to counter it.[10] United Nations members and countries of the European Union are working together to address the issues raised by Cyberhate. In November 2001, 38 countries signed the Council of Europe's Convention on Cybercrime (Archick, 2004). International Convention on the Elimination of all Forms of Racial Discrimination (ICERD) at the United Nations, and European Commission proposed a draft framework decision to ensure that racism and xenophobia are punishable in all member states (OSCE, 2006).

Some other responses could be technological solutions, regulation by ISPs, self-regulation by users and ISPs, political lobbying, and educating children (ADL, 2010). Counter attack, including hacking of racist sites, is also a responsive measure on Cyberhate.[11]

Now I present the theories that are integral parts of my data analysis. My analytical framework is anchored in Scott's model of institutional theory (2001), and Gittell's relational coordination theory (2011). I first discuss Scott's institutional model, which provides a foundation to conduct analysis of the institutional process of loose coordination to self-organized governance of ACH groups. Scott's framework provides an "omnibus" conception of institutions that can be used to examine case studies in various domains. Gittell's (2011) theory of relational coordination is unique in identifying specific dimensions of relationships of shared knowledge, shared goals and mutual respect, and communications.

[10]http://www.un.org/News/Press/docs/2009/note6207.doc.htm. Last accessed 03/24/2012
[11]http://www.israelnationalnews.com/News/Flash.aspx/150523. Last accessed 03/24/2012

3.5 Scott's Model of Institutional Theory

Scott's framework can be utilized to examine complex phenomena (Miller and Loess, 2002). Scott's (2001) organization of pillars and carriers provided a framework to organize, categorize and analyze data I have collected. By applying Scott's framework to my research, I was able to understand which aspects of institutionalism are prominent.

Members of online communities do a lot of activities online and one of them is coordination i.e. patterns of interactions (Meyer and Rowen, 1977). Coordination is one of the major components of the governance of online communities (Thomas and Botha, 2010). Scott's model tells us that members of the online communities invoke institutional carriers in their environment to coordinate against and control Cyberhate. Repeated use of such carriers institutionalizes loose coordination institutionalized toward coordinating self-governance, as members of the community evolve together to coordinate. The theory of relational coordination helps to conceptualize such relational dynamics of coordination among members of ACH communities (Gittell, 2011).

Institutional Pillars and carriers: Institutions are comprised of regulative, normative and cultural-cognitive elements, which provide legitimacy and social conformity. These elements influence human behavior in organizations. Early views placed more emphasis on regulative and normative structures than the cultural-cognitive pillar. Regulative and normative theorists give more attention to the examination of regulative rules and tend to treat constitutive rules as background conditions.

Regulative pillar: Regulative pillars include rules, laws, regulations, governance systems, surveillance, conformity, sanctioning, rewards and punishments that constrain and regularize behaviors. Institutions use sanctioning as a regulative mechanism to govern. These regulative elements could be formal or informal. For example, law enforcement agencies are formal actors, whereas folkways and mores are informal mechanisms.

Normative pillar: A normative pillar emphasizes shared values and norms. It includes values, expectations, taboos, roles, conventions, practices, protocols, and traditions. It focuses on desirable standards of behaviors and specifies how these behaviors should stay within the existing structures. It gives a prescriptive, evaluative and obligatory scope. For example: respect racial diversity and specify rules on how to control racial hate messages. However, in this process some roles become identified with certain actors. "Normative systems constrain on social behavior as well as empower and enable social action. They confer rights as well as responsibilities, privileges as well as duties, licenses as well as mandates" (Scott, 2001, p. 55). For example in Facebook groups only *Admins* can *delete* the hatred messages whereas both *Members* and *Admins* can *warn* against hate messages.

Cultural-cognitive pillar: A Cultural-cognitive pillar includes shared convictions and frames that give a perception about the world and its meaning. It includes beliefs, mental models, categories, identities, schemas, and scripts. It sanctions but follows a presumed or taken-for-granted approach. "The beliefs are "cultural" because they are socially constructed symbolic representations; they are "cognitive" because they provide vital templates for framing individual perceptions and decisions" (Scott, 2007, p. xi). "Meanings arise in interaction and are maintained

and transformed as they are employed to make sense of the ongoing stream of happenings" (Scott 2001, p57). At the intra-organizational level, researchers have examined the development of common scripts (Barley, 1986) and common beliefs (Kunda, 1992) as indicators of cultural-cognitive systems. At the organizational field level, researchers have employed discourse analysis and other types of content-analytic techniques to assess meaning systems (Deephouse, 1996; Hoffman, 1997).

The four carriers

Institutions are transmitted by four types of carriers (Scott, 2001). S*ymbolic systems* (rules, standard processes, values, beliefs, and ideas) are present in the mind as ideas and values; they are simultaneously external to actors and internalized by actors as cognitive frames and beliefs. Many Facebook group members believe that the Earthquake Haiti group on FB is helpful in providing a forum to bring in emergency response professionals, helpers, donors etc. *Relational systems* (governance and authority systems, and identities) are related to role structures, i.e. patterned expectations people cultivate through being embedded in social networks. Relational systems are made up of connections among individual and collective Actors: for example, Admins, Creator, and Members. Admins and Facebook.com have authority and power to control different processes in the Facebook groups. *Routines* are patterned actions and procedures (repetitive activities). Admins repetitively close and open the wall of the Facebook group is as example of routine. A*rtifacts* are tangible objects, such as information technology, which have mandated specifications, but are interpreted and appropriated by people in different ways, depending on conventions and symbolic values associated with them. Earthquake Haiti Facebook groups are itself artifacts.

Scott's typology of institutional pillars and carriers as shown in Table 9, which depicts the organization of the carriers of institutions in corresponding to their respective pillars.

Table 9: Scott's (2001) Typology of Institutional Pillars and Carriers

Carriers	**Pillars**		
	Regulative	**Normative**	**Cultural-Cognitive**
Symbolic systems	Rules, Laws	Values, Expectations	Categories, Typifications, Schema
Relational systems	Governance systems, Power systems	Regimes, Authority systems	Structural Isomorphism, Identities
Routines	Protocols, SOPs	Jobs, Roles, Obedience to duty	Scripts
Artifacts	Objects complying with mandated specifications	Objects meeting conventions, standards	Objects possessing symbolic value

As seen in the table governance systems are one of the relational systems. Scott (2001) presents two types of governance system: authority and power. "Such governance systems are viewed as creating and enforcing codes, norms, and rules and as monitoring and sanctioning the activities of participants" (Scott, 2001, p80). Relational systems help practice governance (Williamson, 1997).

3.6 Relational Coordination Theory

Relational coordination is defined as "a mutually reinforcing process of interaction between communication and relationships carried out for the purpose of task integration" (Gittell, 2011, p3). Relational coordination theory emphasizes communication among members of online communities to be frequent, timely, accurate, and focused on problem solving. Because communication does not occur in a vacuum, effective communication among members is based on mutual respect, shared knowledge and shared goals (Gittell, 2002). The theory of Relational Coordination is unique in identifying specific dimensions of relationships that are integral to the coordination of work, in particular going beyond shared knowledge to include shared goals and mutual respect, while focusing on the development of these relationships between roles rather than between unique individuals (Gittell, 2011). Members may or may not have personal ties but are connected by relationships of shared goals, shared knowledge, and mutual respect. "Together, these mutually reinforcing relationship and communication ties form the basis for coordinated collective action" (Gittel, 2011, p402).

As discussed earlier, relational coordination does not depend on strong personal ties of members but on the roles members play (Gittell, 2011). Due to the technological nature of social media, in online communities several different members can play the same roles. For example, a *Warner* can be any one out of more than 460,000 members. There is no need to identify someone specific as a Warner. This interchangeability of members allows the online communities to execute any tasks by maintaining interdependencies of tasks, i.e., effective coordination.

In online communities of loosely coupled individuals, coordination relies on informal social systems (Sagers et. al., 2004). Social systems, according to Parsons (1951) consists of various individual actors interacting with each other in a situation in such a way that they shape the behavior of actors, including themselves. Online communities such as Facebook groups are unique entities from an organizational perspective. Members of these groups come from different parts of the world. They may hardly know each other and may not have any personal ties. However, they have a shared goal to help victims. They become members of the Haiti group to help victims in their own individual ways. Some pay homage, some donate and some even help physically by going to volunteer in Haiti. The volunteers who are involved in some particular tasks tend to have shared knowledge as well. Admin in Canada closes the Facebook wall at night because no other Admin is available to monitor. Then Admin in France makes sure to open the wall in time. Members in these groups tend to mutually respect each other as well. Members decry and ask for respect when someone defames or dehumanizes others in the FB walls or discussion forums.

According to Gittell (2002), relational coordination does not focus on relationships between participants, but on the roles of participants. Relational coordination is about relationships between, for example, *Warners* and Admins when

a cyberhatred message is posted. The *Warner* could be any member who first sees it and raises a flag. Then Admin has to delete the message. Only the the effective organizational role is played. The Warner and the Admin may not know each other but react to show a relationship based on the roles they play.

How does the relational coordination reinforce the roles of one another? Gittell (2009) argues that communication relationships influence the frequency and quality of communication and these in turn influence the quality of the relationship. For example when the hatred messages started to appear on the studied cases members were strongly opposing and expressing their anti-hate views by posting against hatred messages. These members interacted through Facebook postings and eventually built a strong relationship by eventually forming an anti-cyberhate group.

3.7 Mapping Gittell's Model to Scott's Institutional Theory

When there are institutions, there are actors. DiMaggio (1988) is one of the first institutional theorists to discuss agents and their roles in institutional creation, maintenance, and demise. Actors create new organizations by garnering cognitive, normative, and regulative legitimacy (Aldrich, 1999). When there are actors, there are actions and interdependencies when they have shared goals. Achieving the shared goals require actors to coordinate with each other (Malone and Crowston, 1990) but they need to organize themselves more than a single actor seeking the same goals would do (Malone, 1988). Scott (2008, p. 98) clarifies that an actor is not a single entity but "a variety of roles and functions distributed across diverse players". He argues connections among actors produce relational systems (Scott, 2003) but does not suggest how it can be achieved.

Scott's (2001) perspective of institutional theory (via his pillars carriers framework) helps bridge the gap between identifying coordination as a source of governance and showing how institutional structures (such as authority, norms and values) embedded in the ACHM help coordination against Cyberhate. Moreover, I expect to contribute my analysis to add new perspectives to research based on Scott's model in the domain of online communities. Online communities of loosely coupled individuals are accustomed to coordinating the voluntary contributions of the members (Sagers, Wasko, and Dickey, 2004). To understand coordination, particularly relational coordination, between behaviors of actors in ACHM, I reviewed relational coordination theory to help bridge the gap in Scott's framework vis-à-vis coordination mechanism. With these perspectives I analyzed data collected for this case study to explore if relational coordination fits the gap in Scott's model. A short review was carried out on control literatures to supplement my framework for data analysis. My proposition is that relational coordination within the relational systems is one of the carriers of institutions and control can be achieved through coordination (from coordination to control), which will avoid implementing harsh regulative control mechanisms. The Table 10 depicts the mapping of Scott's and Gittell's models.

Table 10: Mapping Scott's Model and Gittell's Model		
Institutional Theory		**Relational Coordination Theory**
Regulative elements	Rules, Surveillance mechanisms, Sanctions, Force, Fear, Expedience Structures are: state, trade associations, business groups, firms, agencies	Actors are connected by relationships of shared goals, shared knowledge and mutual respect.
Normative elements	Norms, Roles, Expectations, Values, Morality, Social obligations	
Cultural-Cognitive	Shared conceptions, Sense making, Taken for granted belief, Logic of action, Shared understandings	
Symbolic systems: symbolic schemata into which meaningful information is coded and conveyed.	Rules, Laws, Regulations Values, expectations, standards Categories, Typifications, schema	Mutual respect Shared understandings/Knowledge Shared Goals
Relational Systems: are relationships and linkages	A relational system is a set of elements where relationships exist among the elements. Examples are governance systems, power systems, regimes, authority systems, structural isomorphism, and identities. Relational systems consist of relationships that influence how groups interact, and how individuals act (Dacin et al, 1999). "Relations connect pairs of agents into larger relational systems" (Scott, 2000, p3). Relational systems include interpersonal as well as inter-organizational linkages.	Relationships: • Mutual respect • Shared Goals • Shared understandings/Knowledge

Routines (automated series of instructions) carried out in a specific order.	Protocols, SOPs Jobs, Roles, Obedience to duty Scripts: (the social role or behavior appropriate to particular situations that an individual absorbs through cultural influences and association with others.) Routines are habitualized behaviors, or patterned actions that mirror tacit knowledge possessed and conveyed by actors.	Communication: • Frequent • Timely • Accurate • Problem-Solving
Artifacts	Objects used to comply with mandated specifications, for example a handbook or manual, discussion forum, Facebook wall, email. Artifacts are material culture that actors create to help out in the performance of tasks.	Gittell (2000) found a non-significant relationship to IT. However I assumed with Web 2.0 relationship between relational coordination and IT artifact would be high because of possibility of increased interactions through walls, chats, emails and forums in Facebook. This could be a possible future research.
Sources: Scott (2001; and 2008) and Gittell (2000; 2009; and 2011)		

The above mapping suggests that relationships, actors, roles, and expectations are common to both theories. Scott contends relational systems are relationships, which guide how actors interact with each other. For example, governance system (authority) influence bosses who give orders and subordinates who follow that order. However, using Scott's institutional theory I argue that patterns of coordination are influenced by the collective actors and organizations involved in disaster response. Each of these sources of institutional practices affect actors' attempts to act in the disaster response at the research setting by prescribing actions to meet regulatory, normative and cultural-cognitive requirements. The emergent environment could be chaotic and actors may be in competition and conflict. The large number and variety of institutional forces at play in the disaster response and humanitarian assistance have the capacity to create an extremely complex institutional context where coordination becomes difficult.

For Scott, relationship is linkages, but he doesn't explain how these linkages work or can be achieved. I am using – taken-for-granted- relational coordination theory to argue that actors in online communities if connected by relationships of shared goals, shared knowledge and mutual respect bring-in social order. I argue that in non-binding online communities the reproduction of coordinated governance is possible when relation coordination is working. I suggest that these factors create relationships between actors, which help in institutionalization process of non-binding

online communities. However the achievement of relational coordination depends on utilization of institutional practices (Gittell, 2011). For this, I will measure relational coordination by identifying a work process after identifying the roles or functional groups (through Netnography) that are involved in carrying out that focal work process. Figure 1 depicts the concept of relational coordination mediating the performance effects of institutional practices outcome, i. e., ACH coordination to control Cyberhate.

Figure 1: Mapping of Scott's Model and Gittel's Model

3.8 Facebook Groups, Institutional Elements and Relational Coordination

Creating a Facebook group needs some institutional arrangements. To create a group one has to have a Facebook account and agree to the terms and conditions of Facebook Inc[12]. Facebook rules and regulations or terms and conditions are the legitimate regulative pillar of the groups. The person who creates the group is termed as the Creator by the Facebook and can act as an Administrator (Admin). The Creator can add more Admins and can authorize others to manage the group by giving powers e.g., accept request to join the group or remove a member or edit group settings. Leadership is one of the powerful normative pillars of the Facebook group. Admins (leaders) in the Group can enforce rules when expectations are not complied. Shared belief or goal, cultural-cognitive pillar, brings Netizens to converge on crisis response Facebook groups. The Admins and Members have shared goals and coordinate together to help victims. However their relationship is based on the functions they execute. The success of their efforts hinges on relational coordination between their functions.

[12] https://www.facebook.com/help/162866443847527/ Last accessed on 04/18/14

CHAPTER 4. OVERVIEW OF CASE STUDIES

4.1 Emergent Response Groups on Facebook

Haiti Earthquake occurred on Tuesday, 12 Jan 2010 at 4:53 PM local time. It had a magnitude of 7 in Richter scale. According to a United States Geological Survey department more than 100,000 people were killed[13]. Several Haiti earthquake emergent response groups were created on social media including Facebook. According to Majchrzak, Jarvenpaa and Hollingshead (2007) emergent response groups do not have pre-defined membership, tasks, and roles. For my study, I selected two emergent response groups on Haiti Earthquake based on their combined membership base of more than 700,000.

The names of the research sites are EARTHQUAKE HAITI and EARTHQUAKE HAITI APPEAL PLEASE JOIN EVERY CLICK WILL FEED A CHILD, INVITE!

I observed these sites from 13th January 2010 to 25th September 2010. Additional observation was carried after one year on 28th September 2011.

4.1.1 EARTHQUAKE HAITI:

The EARTHQUAKE HAITI Facebook group (Figure 2) was organized and managed by 10 administrators (Admins) who were geographically located in Canada, France and the USA. Highest membership was 315,938 recorded on 2/11/10. Its description information page consisted of a message, "This page has been created as an informational page to allow everyone to share general comments, relevant information, to help find family members in Haiti, and guide everyone in donating only to legitimate relief organizations". It was created under the "Common interest-current events" category. The group (termed as EQ1 Group) was more active than the second group (termed as EQ2 Group) in institutional practices to control Cyberhate.

Figure 2: Research Sites 1

[13] http://earthquake.usgs.gov/earthquakes/eqinthenews/2010/us2010rja6/#details

4.1.2 EARTHQUAKE HAITI APPEAL PLEASE JOIN EVERY CLICK WILL FEED A CHILD, INVITE! :

This group (Figure 3) was organized and managed by one administrator. It had a membership base of 460,420 recorded on 10/10/10. Its description information page message was, "This group has been made to raise awareness [sic] about the terrible earthquake that has happened in Haiti. PLEASE INVITE ALL YOUR FRIENDS SO HAITI GETS THE HELP & KEEP INVITING THANKYOU!" It was created under "Just for fun – fan clubs" category of Facebook groups. More antisocial behaviors including Cyberhate were visible on this site in comparison to the EARTHQUAKE HAITI site (EQ1 Goup). Some of its members formed an Anti-cyberhateGroup on Facebook called "Racism is Schism".

Figure 3 : Research Site 2

4.2 Longitudinal Observation

During initial observation I found pray, help, seeking info, and sympathy as frequently posted words. Two main theme occurs on the FB group discourse: "Do Something" and "L'Union fait la Force!". After seeing the popularity of these two phrases Admin used them to create fund raising events on Facebook itself during the growth and upkeep period. Admins and Members alike are seen posting these two key words. The profile page of the group included the phrase "L'Union fait la Force!" which was removed on 20th January. The profile was redesigned with more professional look.

"Do Something":

> *"I am only one, but still I am one. I cannot do everything, but still I can do something; and because I cannot do everything, I will not refuse to do something that I can do."- Helen Keller*

LETS JOIN TOGETHER!!!!! we must do something.

This posting is the first posting that asked members to work together. The member posted Helen Keller's famous quote. Since then numerous comments were posted in which members urged others to "do something". Many members on 12th and 13th January used this phrase frequently.

One member went one step ahead and created an event "Do Something for Haiti" that was slated for 14th January to 15th January. The objective was to raise funds. Members were asked to join the event and donate money to charity organizations. They were asked to come back and post on the event site how much they donated.

Admins were seen posting comments encouraging members to do something about the crisis. They encouraged members to donate, raise awareness about the group to increase the membership base, and fight against the offenders. Moreover Admins also were asking members to "spread the word" to raise awareness about legitimate or trust worthy organizations for making donations, and warn about scammers. In addition members were also posting and urging others to do something.

"L'Union fait la Force!": The literal meaning of this phrase is "Unity is strength". Admins promoted this theme on the group's profile page and posted the phrase many times. They wanted all to unite against the crisis. "This is not a time to be negative and critical but a time to unite and be supportive."

The relationship between the two phrases as well as members and Admins are very interesting. The "Do Something" phrase was popularized by members and adopted by Admins. "L'Union fait la Force!" was used by Admins on the profile info page and was popularized by members who mentioned the phrase frequently. Events created by members or Admins had titles with both the phrases.

These two phrases recycled frequently but became limited to few postings after January 20th. The reason could be that members realize that help is on the way for Haiti.

Outreach: Admins, in a bid to increase the membership, canvassed the group frequently. The cited reason for canvassing was to create awareness about the crisis.

4.2.1 Emergence of institutional elements and coordination in emergent response groups

Social networking sites like Facebook is a forum to share information with family and friends. However not all members have the same intentions. It can also allow people with more extreme and hateful viewpoints to meet and exchange their ideas against others. Social networking forums like facebook, youtube, myspace have become a breeding ground for racial hate groups. Such behavior has gone viral over the years.

During my observation I noted that several invoking of institutional elements by Admins of EQ1. A glimpse of time line with institutional elements is presented for the month of January as below.

12th -13th January:

- Identity: Profile picture (Artifacts).

14th January:

- First anti-cyberhateresponse "be respectful".
- Posted to provide name and link of offender (first SOP emerged).
- Reminded purpose of the group (post posted initially).

15th January:

- Rule: Visit info page.
- Rule: not to post any inappropriate comments
- SOP: Report offensive postings to Admin (2nd SOP emerged)
- Expectations: HOW CAN YOU HELP?
- Sanction: Photo halted (1st enforcement) due to posting of porn photos
- Repeated ACH postings
- Recruited 1 additional Administrator
- Photo regulation started

16th January:

- Request to visit info pages
- Expectations: HOW CAN YOU HELP?
- Posted repeated warning/ACH messages
- Photo posting regulated

17th January:

- Jobs/Roles - Monitoring and Reporting
- Admiration for those who were working hard on the sites
- Report and ignore: Advice regarding offending messages
- Repeated ACH postings

18th January:

- Enforcing (by removing offender)
- Helping Admins regarding locating offenders
- SOS calls by Members when Administrators were not responding to hatred messages. Management issue of low manpower and fast growing postings.
- Enforcement through graduated sanction (Ostrom, 1990)

19th January:

- Reporting: regular UPDATES with request to inform offenders
- SOP: Halt wall when no Monitoring by Admins
- Resume wall posting by next Admin after 3-4 hours

20th January:

- Guiding: teaching members how to report.
- Governance: NO FREEDOM OF SPEECH – posted by one of the Admins.
- Regulative: Authority- "I am the admin" posted by one of the Admins.
- Strong warning
- Cheerleading for the hard working Admins
- Recruited 3 additional Admins
- Routines: Time distance job schedule as these Admins were co-located in USA, France and Canada.

21st January

- Role: Detecting
- Discovered Troll Command Center. Data evidence suggests members of this group used to gather and attack the group EQ1.

24th January

- Vigilance: Member posted a message to check if Admins were working (monitoring)
- Recruited 2 additional Administrator

24th January

- Recruited 1 additional Administrator

30th January:

- Identity: Troll Busters

9th February:

- Change in update (notice) content with love and affection note.

I observed that over a period of time members of anti-cyberhategroup increased their monitoring, repeatedly reported to block offenders, and enforcing i.e., repeated blocking occurred. This suggests that members of the ACH group immediately report offending postings. The enforcing is expected or taken for granted by the monitors. In this way the members of the ACH group reproduced a habitualized patterned actions. They repeatedly coordinated to control cyberhate postings and offenders, thus bringing-in a social order in their community. According to Jepperson (1991) institutionalization occurs when habitualized patterned actions (in my case ACH coordination) are reproduced again and again. According to Meyer and Rowen (1977) coordination is pattern of interactions. Based on this empirical observation and theoretical knowledge I developed my research questions.

4.2.2 Emergent phenomenon online

One of the striking observations is a "tug of war" between members who exploit crisis situation and others who take counter measures to minimize the damages. For example, the core members involved in Earthquake Haiti facebook group were always vigilant about any malicious postings on the discussion boards of their group. In addition, general members also play role to warn about such acts. Therefore people no longer wait for responses from authorities. Unlike in the time of Fritz and Mathewson (1957), people with the help of new technologies are reacting faster than governments. Their counter measures are prompt.

My observation helped me to know about a group called "troll command headquarters" on 21st January. According to a member of group EQ1, who discovered this center, this site was a base for offenders to attack different sites including group EQ1. Here is the excerpt.

XXXXX13 wrote on January 21, 2010 at 5:15pm

After following some of the trolls who had posted on this thread, I ended up finding one group
http://www.facebook.com/group.php?v=wall&ref=mf&gid=117783775772
from which they launch their "troll attack".
Several names of the trolls that were active in our group are on their friends' list. And Earthquake Haiti was mentioned on their wall.

During disasters in the physical world, the physical convergence is a centralized and formal phenomenon where authoritative environment prevails. In such situations government authorities dictate people's participation on the ground. However in the virtual world, such operations are decentralized where

people have sense of higher participation and collaboration. Now, information-seeking people may not depend only on the government expertise but they can take advantage of the online users spread over the cyberspace. Such collaboration may not only be decentralized but, also, be ephemeral or informal in nature. In this thesis, such ephemeral role defined for such activities is termed as Detective, which is one of the roles of anti-cyberhatecoordination who discovered the troll command headquarters.

Screen shot of the troll command headquarters is presented here (Figure 6). Empirical evidence suggests that Facebook shut down the troll command headquarters due to protest of Netizens.

Figure 4: Troll Command Headquarters

I found that that members were getting together and fighting back against hatred online. The counter strategy adopted by the victims of racial hate was formation of anti-cyberhate collaboration group called "Racism is Schism". The home page of this group denounces racial hates as well as published names of the members who promote racial hates. They even monitor every posting so that no own get a chance to hurt others and immediately raise flags if someone does. Screen shot of this group is presented here (Figure 7).

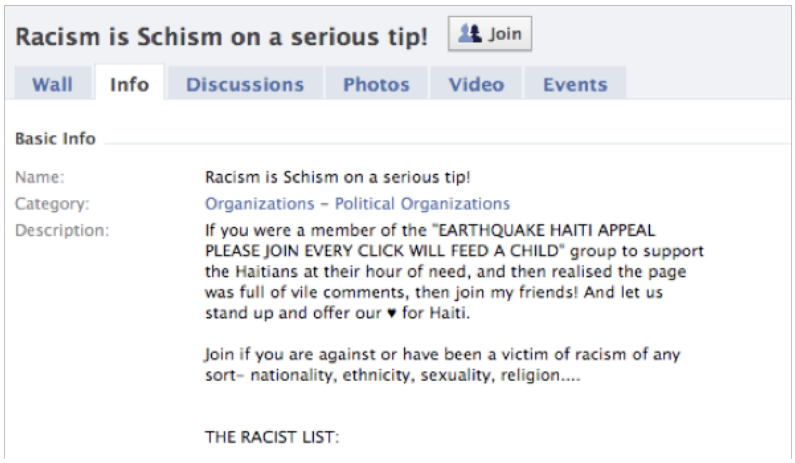

Figure 5: Anti-cyberhate Alliance Group on Facebook (Emergent)

4.2.3 Membership

The growth of membership was exponential during the early part of the life cycle (Figure 4). The membership growth was 574% in the month of January from 54,310 (recorded on 01/13/2010, 2:46PM) to 311,726 (recorded on 1/31/2010, 10:30PM). It grew to be 315,938 on 02/11/2010, 9:47 PM, and had a slight increase in March (refer Figure 6). The membership declined from April onwards.

The membership base of EQ2 is presented in Figure 7. At the initial phase the membership of EQ2 was low but grew faster afterwards. On 24 January, 93000 members were recorded. However it reached to 217589 in 27 January, which reached 400,000 in 21 February.

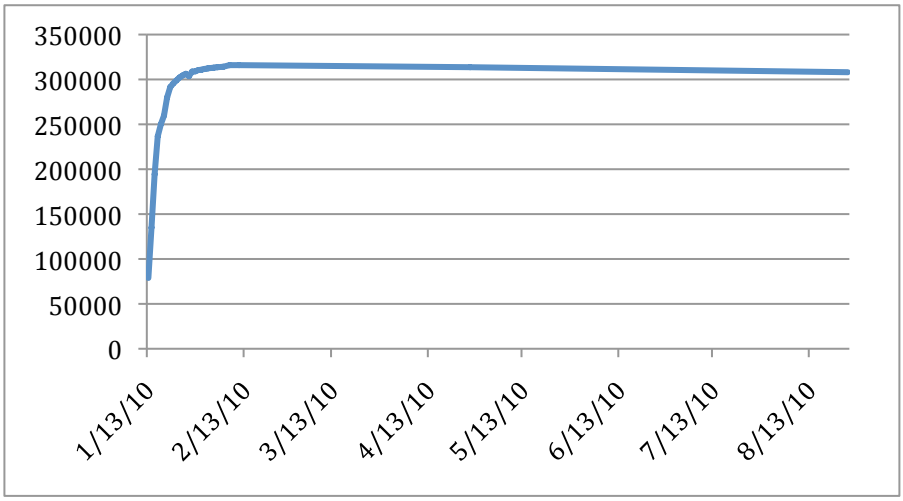

Figure 6: Membership of the Group EQ1

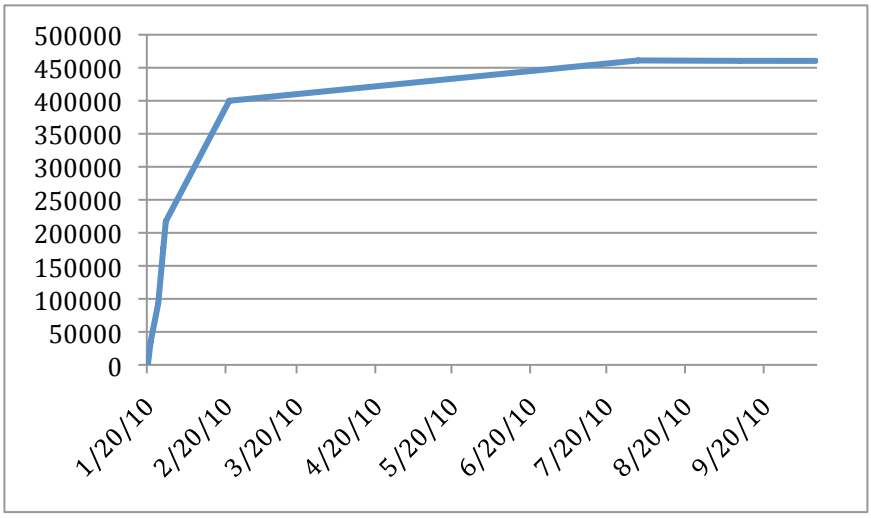

Figure 7: Membership of the Group EQ2

4.2.4 Recruitment of key members

As mentioned earlier EQ1 started with 3 Admins and additional 7 members were recruited later on as Admins. Except for XXXXX13, all other members worked as Admins. However XXXXX13 was a key member of the ACH coordination group. I observed that these key members on EQ1 had division of labor based on these five roles as shown in Figure 8. Seven additional Admins were recruited once the membership grew exponentially and instances of Cyberhate swelled up. Sixty percent of Admins were recruited after 19th January when the first incident of vandal attack occurred.

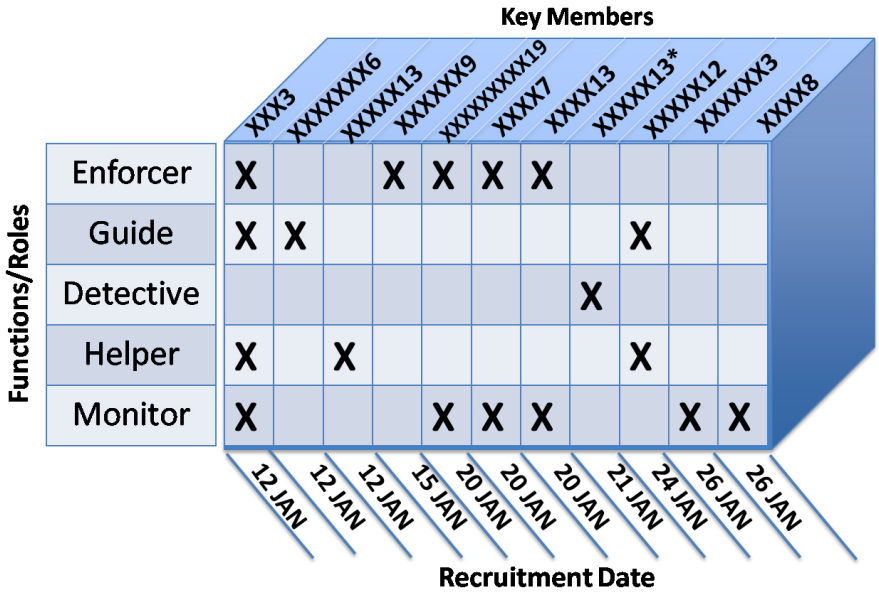

Figure 8: Five Functional Groups Involved in the Anti-cyberhate Coordination

4.2.6 Leadership – The Guide:

During my observation I noted that some members were recruited as Administrators. I am presenting a profile of one of such members which we will call here as XXXXX12.

Initially XXXXX12 was a regular member of group EQ1. However XXXXX12 participation gradually increased. XXXXX12 "liked" others posts and posted of XXXXX12 own comments regularly. XXXXX12 even reminded other members about the purpose of the group.

XXXXX12 gave responses to Admins' posts as well as members' posts. XXXXX12 active participation included warning, flagging and reporting. XXXXX12 was seen responding even when Admins was not responding to members call for help. XXXXX12 taught novice members how to report regarding offending postings.

XXXXX12 responses to others' posts were regular and XXXXX12 engaged in interactions regularly. XXXXX12 was seen thanking members during interactions. XXXXX12 encouraged group members as well as complimented members and helped in information providing. At one time XXXXX12 was seen posting at 3:20 in the morning. Though XXXXX12 was not an Admin XXXXX12 was actively taking part in the group.

XXXXX12 posted quotes or phrases that can be termed as motivational. For example:

Teach this triple truth to all: A generous heart, kind speech, and a life of service and compassion are the things which renew humanity. ~ Gautama Buddha".

" We are living in a time of uncertainty, anxiety, fear, and despair. It is essential that you become aware of the light, power, and strength within each of you, and that you learn to use those inner resources in service of your own and others' growth. ~ Elizabeth Kubler-Ross"

After four days of XXXXX12 involvement XXXXX12 posted a message to all members asking to report about haters or scammers. On 18th January XXXXX12 wrote, "Please = when you see hate, scams or spammers = report them. This is far too important to leave them take up valuable space."

XXXXX12 was promoted to Admin on 24 January 2010. XXXXX12's active participation and reputation could be reason of her promotion. On 26th January, other members of ACH team gave her a new name "#1 Police Officer". In this thesis XXXXX12 worked as the Guide in the ACH coordination group.

Other members of the groups are similar to XXXXX12. However, some of them exhibit specific traits such as helper and detective (see Figure 8). The detective XXXXX13 was not part of the Admin group but is considered a key member of ACH coordination. I did not find any evidence that suggest Admins doing detective jobs. I suspect they were busy in managing their group so did not ventured out to conduct surveillance on other Facebook groups. Majority of the key members are the Monitors and the Enforcers.

CHAPTER 5. METHODOLOGY

This qualitative case study used the Netnography (Kozinets, 2010) approach to conduct an institutional analysis of two social networking sites. Yin (1993) notes case study as one of the forms of qualitative research and defines "a case study is an empirical inquiry that investigates a contemporary phenomenon within its real life context, especially when the boundaries between phenomenon and context are not clearly evident" Yin (2003, p. 13). Qualitative researchers study things, phenomena, people in their natural settings, and interpret the meanings that people bring to these (Yin, 1993). In order to understand institutionalism in online communities, I will describe research sites, data gathering, data analysis and validity of study results.

5.1 Research Sites

As mention in earlier chapter there are two foci of this study are EARTHQUAKE HAITI and EARTHQUAKE HAITI APPEAL PLEASE JOIN EVERY CLICK WILL FEED A CHILD, INVITE!

5.2 Data Collection

I employed ethnography using the Internet to collect data that could be relevant to study members' behaviors of the research sites. I found no consensus on the naming of the methodology among researchers. For example it has been used as virtual ethnography (Hine, 1994, 2000), Cyber ethnography (Fox and Roberts, 1999; and Rybas and Gajjala, 2007), Webnography (Puri, 2007) and Digital ethnography (Murthy, 2008).

Netnography: I followed Kozinets's (2010) Netnography method to collect and analyze the data. Kozinets (2010, p 60) defines Netnography as "participant-observational research based in online fieldwork. It uses computer-mediated communications as a source of data to arrive at the ethnographic understanding and representation of cultural or communal phenomena." In simple terms, Netography refers to "the textual output of Internet-related field work" (Kozinets, 1997).

Similar to the social communities, in online communities culture is learned and consists of meaning learned through computer-mediated communications. "Online communities form or manifest cultures, the learned beliefs, values, and customs that serve to order, guide, and direct the behavior of a particular society or group" (Arnold and Wallendorf, 1994, p. 485). Utilizing Netnography, I collected cultural data on institutional practices and anti-cyberhate coordination. Analysis based on shared meaning, which is learned in the Facebook groups, of institutional dimensions and coordination helped me understand how members of the community respond to cyberhate.

Reasons to use Netnography (Kozinets, 2010):

- to study online communities.
- for studying online roles.
- Faster, Simpler, less expensive.
- Can be unobtrusive which is suitable to sensitive topics.
- Provides access to data all the time.
- It may be new but it has distinct set of procedures that have been already tested by different researchers. That provide some reliability and confer some consistency on a new field of study.

Limitations: Kozinets wants researcher to declare in most of the situations which I could not do. However I maintained ethical standard by anonymizing the members.

I followed procedures of Netnography as given in Table 11.

Table 11: Procedures of Netnography

Procedures of Netnography (Kozinets, 2002, pp61-72)	Sample of Analysis and Comments
i. **Research planning and Entrée:** researchers must have specific research questions, identify particular online forums and learn about the forums or the groups.	*My research questions are:* RQ1: How do members of online communities practice or invoke a variety of institutional carriers – from rules, values, power systems, protocols to schemas and IT artifacts – to influence the online communities against Cyberhate? Rq1.1: How do members of online communities practice or invoke *regulative institutional carriers* to influence the online communities against Cyberhate? Rq1.2: How do members of online communities practice or invoke *normative institutional carriers* to influence the online communities against Cyberhate? Rq1.3: How do members of online communities practice or invoke *cultural-cognitive institutional carriers* to influence the online communities against Cyberhate? RQ2: How does Relational Coordination mediate the effects of the institutional practices on the online communities against Cyberhate?

		Identified online forums: EARTHQUAKE HAITI and EARTHQUAKE HAITI APPEAL PLEASE JOIN EVERY CLICK WILL FEED A CHILD, INVITE!
ii.	**Data collection:** direct copy from the computer-mediated communications of online community members, and the researcher's inscribes regarding his/her observations of the community, its members, interactions and meanings.	*Example:* *Member Name Xxxxxx Xxxxx: Haiti! well well! A earthquake hit "Whatever". Why the fuck you want donations! Doesnt gonna make your country better. Is still fucked country anyway..Hope America nuke your country* *Member Name Xxxxx Xxxx Xxxxxx: don't be a knobhead about this terrible earthquake!! you prick!!!!* *Member Name Xxxxxxx Xx: (to first poster above) ur a utter fuckface. allow u and goo suck a knob* *Researcher's inscribes:* The postings above illustrate the necessity to converge some common views in order for a group to exist and survive. Two members immediately disapprove a member who posted anti-Haiti messages. Their approach to exercising authority (Scott, 2008) is to induce folkways and mores (Dowd, 1936) in a group.
iii.	**Data analysis and interpretation:** classify or categorize postings and members, write field notes, code data and contextualize online data. Collection and analysis go side by side.	*One of the possible categories is Troll.* *Another category is "closing the wall" – a standard operating procedure followed by Admins.* *Researcher's interpretation and notes:* The troll attempts to pass as a legitimate participant, sharing the group's common interests and concerns. On the one hand, helpers were busy in a huge and daunting task of relief operations in the physical space. On the other hand the trolls were busy asking other trolls to go and hijack the other group. In response Admins started to self-organize to "close and open the wall" to prevent

		unwanted postings when they are not monitoring the wall or the discussion forums.
iv.	**Ensuring ethical standards:** "four ethical research procedures are: (1) the researcher should fully disclose his/her presence, affiliations and intentions to online community members during any research, (2) the researchers should ensure confidentiality and anonymity to informants, and (3) the researcher should seek and incorporate feedback from members of the online community being researched. (4) requires the researcher to contact community members and obtain their permission (informed consent) to use any specific postings that are to be directly quoted in the research" Kozinets (2002, p65).	I maintained ethical standards as prescribed. I did not contact any members or Admins of these groups because I was conducting Netnography as an invisible non-participant, unstructured observational researcher. Moreover, the groups were open to all, and anyone could be its member without any invitation. As Facebook groups are virtual public goods its content can be freely used for research purpose. I am not disclosing profile information of the Admins and all the members. Members Facebook profile name will be coded as "xxxx xxxxx".
v.	Research representation: presentations and publish findings and maintain standards.	I intend to publish findings as it may help other researchers.

I conducted the Netnography as an invisible non-participant, unstructured observational researcher (Mann & Sutton, 1998; Pollock, 2006) to gather data. Basically, the observation/participation is limited to observing others' conversations and taking field notes. I downloaded HTML page of the two groups and saved them in PDF format. I collected 5235 pages and 2243 pages PDF documents for EQ1 and EQ2 respectively. My note taking is an unstructured observation because data collection and recording behavior are not scheduled based on any specific rules or structure. This approach gives maximum flexibility in order to collect a myriad of potential data (Pollock, 2006). I logged in to these research sites at least four to five times a day.

Extant texts: For my research purpose, I used extant texts as a primary source of data. I collected all the texts written by members of the research sites. "Extant texts consist of varied documents that the researcher had no hand in shaping" (Charmaz, 2006, p. 67). I treated extant texts as data to address my research questions although these texts are being produced for other purposes. This I did, as I was not able to collect data online 24/7.

Text Mining: To identify some pattern I ran a text mining application GATE (General Architecture for Text Engineering) developed by University of Sheffield of UK. Text mining refers to the process of deriving information from text. Typical text-mining task includes text categorization and text clustering. Some of the words and phrases that were found during preliminary information extraction process are given in Table 12.

Table 12: Words and Phrases found in Facebook Groups

Haiti	Rescue	Looking for missing	Call for rescue	Providing social support
Earthquake	Looting	Providing information about damage	Asking about damage	Providing information about how to get help
Help	Emergency	Offering assistance	Providing information to help locate missing persons	Providing information about missing that had been found
Food	Damage	Checking on status of loved one's area	Organization of rescue help	Offer rescue help
Shelter	Response	Posting official news	Question about looting	Comment on looting
Disaster	Family	Attempts to foster community	Communicating through FB pages	Racial hatred
USA	Shelter	Warning about scams	Raise funds	Counter to racial hatred
Relief	Victim	Watch out for trolls	Government	Evacuation

The preliminary observation indicates incidences of cyberhate "racial hatred" and counter to racial hatred comments posted by members of the community.

Use of websites, documents, records and artifacts: I used documents, records and artifacts like Facebook pages, websites and records for further references.

Use of Java scripts to download data: I used Java scripts to download Facebook data by automatically opening walls. With these scripts opening the older posts was easy. Here is one example of the scripts.

javascript:vari=0,showMore=function(){if(i<10){ProfileStream.getInstance().showMore();i=i+1;setTimeout(showMore,2000);}};showMore();

The scripts opened the older posts in the wall every two seconds for 10 times.

Pilot study: In 2012, Subba and Bui conducted a pilot study to conceptualize the evolution of ad-hoc and improvised self-coordination to institutionalized self-governance of non-binding online groups. The purpose of this research was to observe Cyberhate and ACH movements online. Immediately after the earthquake, we searched for information related to Haiti on the Internet. Initial data collection from a number of social networking sites suggested that Facebook was the primary forum in English that uncovered the many aspects of Cyberhate. There was evidence that Cyberhate expressed by Netizens was linked to cultural differences, nationalism, relation and races. It was thus necessary to collect data globally. These forums allowed us to obverse the social interaction without having to subscribe as a group member. We reviewed and filtered thousands of postings, and focused on those that seemed to suggest the complex nature of collaboration, coordination, organization and self-governance and institutionalization effort during this crisis.

Key conceptual findings are summarized in Table 13 located in the conclusion of the exploratory paper.

Table 13: Evolution of Loose Self-coordination to Institutionalized Self-governance

Self Coordination	Types of Coordination	Examples of Self-coordination and Self-governance Activities
Ad-hoc, improvised, self-coordinated policy setting	Negotiated policy and code of conduct by Admins	Agreement of ethical practices Consensus on Policy walls
	Members agree on what would be appropriate norms	Implicit acceptance of group norms
Volunteered-based and self-reported intelligence	Collaborative scheduling	Scheduling of the Admins' responsibility to monitor walls Random reporting by general group members
	Collective reinforcement	Warning and detection Rally of support of opinions
Volunteer-based and self-governed enforcement	Coordination by languages, geography and severity of violations	Social networking team responsible for violations of terms and conditions
	Ad-hoc enforcement of agreed policy, norms	Admins to exercise their authority:

	and response operating procedures	Warning Deleting postings Blocking members Unsubscribing members Reporting to social networking site
Institutionalization and self-governance	Consensus seeking Volunteering singing up as new members Open membership and recruiting	Collective creation of an organized entity: Victimized members to propose new ACH group(s)
Source: Subba and Bui (2012)		

The pilot study suggested that open online communities may start as ad-hoc - but eventually may evolve into stable communities. We observed that such social networks emerge from loose self-coordination to coordinated self-governance. This study also helps raise an important research issue of how, and under what conditions, Netizens decide to get involved without formally elected leaders or defined rules of engagement in a seemingly democratic forum.

5.3 Data Analysis

Data analysis is an iterative process and takes place simultaneously with data collection (Yin, 2003). "Data analysis consists of examining, categorizing, tabulating, testing, or otherwise recombining both quantitative and qualitative evidence to address the initial propositions of a study" (Yin, 2003, p. 109). I followed the theoretical proposition strategy (Yin, 2003) to analyze the case study evidences. The proposed theoretical framework, presented in an earlier chapter, and based on literature and supported by the pilot study, is my proposition that have shaped my data collection plan. According to Yin (2003), theoretical propositions particularly in finding answers to "how" and "why" questions are extremely helpful in guiding case study analysis. I followed the explanation-building technique (Yin, 2003) for theoretical proposition analysis. In the explanation-building technique, "the goal is to analyze the case study data by building an explanation of the case" (Yin, 2003, p. 120). I am aware of the major limitation of this strategy, i.e., a loss of focus. However, I checked this limitation by using methods such as maintaining constant reference to the research objectives, creating a case study database, and following a chain of evidence (Yin, 2003).

There are three sources of categories and a coding scheme: the data; previous related studies; and theories (Zhang and Wildemuth, 2009). I adopted a multiple approach strategy for data analysis – "data-driven" coding (Strauss and Corbin, 1998) and "theory-driven" coding (Boyatzis, 1998). The first coding approach, using Netnography, helped discover possible emergent institutional aspects including roles in unchartered domain of research on self-emerging online communities. It was used

to identify and analysis of the institutional characteristics and practices - prominent, non-prominent and missing in these communities. Similarly, the second approach "theory-driven" was used to identify and analysis of the institutional characteristics and practices - prominent, non-prominent and missing in these communities. To formulate codes for institutional practices I used institutional theory: specifically Scott's (2001) model of pillars and carriers.

Netnography for data analysis: I conducted data analysis based on the Netnography (Kozinets, 2010, p119) approach, which offers a method called "analytic moves arranged in sequence". The steps, developed by Miles and Huberman (1994) theory, are as follows:

Coding: Coding is a process for categorizing my data. According to Strauss & Corbin (1998, p. 3) coding is "the analytic process by which data are fractured, conceptualized, and integrated to form theory". According to Creswell & Clark (2007), the coding process is the core feature of the qualitative data including the process of grouping evidences and labeling ideas. Coding is based on three coding processes: open, axial and selective as defined by Strauss & Corbin (1998).

My coding approach is a mix approach of coding down "priori" (Saldana, 2009) and coding up (emergent and open). The emergent codes are categories that were found in the data as it is. Using *open coding,* I affixed codes or categories to the data collected from the postings found on the research sites - walls and discussion forums, field notes, images and websites. Open coding divides data into distinct and separate pieces, which helps to identify concepts in the data. When concepts found similar to each other are kept together, categories encompassing these concepts emerge.

The relationships between categories and concepts were found by using *axial coding* – sub-categories are related to categories. I noted important categories by *selective coding* which usually emerge inductively through a close reading of the data and label the data as belonging to some general phenomenon.

My selection of coding approach like open, axial and selective coding is of rigorous data analysis procedures and can be used for non-grounded theory study as well (Saldana, 2009). Interrelationship between these coding methods, memo writing and data help generate core categories. However, in my experience some of the categories were emergent before synthesizing codes into core categories.

Noting: I noted my reflections (by memo) on the data while coding.

Abstracting and Comparing: I identified similar (or repeated) phrases, shared sequences, relationships, and distinct differences to build categorized codes into more general patterns. The repeated instances are patterns that began to tell a story.

Checking and refinement: Then I went back to the research sites for the next round of data collection in order to refine the understandings of patterns, processes, commonalities and differences.

Generalizing: Linking the codes created abstractions that turned into generalizations.

Theorizing: I confronted the generalizations gathered from the data with the existing body of knowledge, i.e., institutional theory and relational coordination theory to theorize my findings.

During the data analysis process I also followed recommendations suggested by Seidel (1998) on noticing, collecting, and thinking process, which Friese (2012) termed as the NCT method.

I found core categories of institutionalism that have helped me, for example, theorize that loosely-binding self-emerging online communities evolve to become

inchoate social networks. Furthermore, the categories helped me to extrapolate relational coordination to strengthen social order in the online communities.

Scott's Pillars and Carriers for data analysis: A framework based on Scott's typology of institutional pillars and carriers was constructed to address research question RQ1 and secondary research questions Rq1.1, Rq1.2 and Rq1.3 as shown in Table 14. Framework worksheet was developed for each research sites. This framework was used for analyzing threads collected on Facebook wall and discussion forum.

Table 14: Framework Worksheet is Developed for Each Research Sites

Carriers	**Pillars**		
	Regulative	**Normative**	**Cultural-Cognitive**
Symbolic systems	Rules, Laws	Values, Expectations	Categories, Typifications, Schema
Relational systems	Governance systems, Power systems	Regimes, Authority systems	Structural Isomorphism, Identities
Routines	Protocols, SOPs	Jobs, Roles, Obedience to duty	Scripts
Artifacts	Objects complying with mandated specifications	Objects meeting conventions, standards	Objects possessing symbolic value

Each carrier (rules, laws, values, etc.) was used for "theory driven" coding to explain institutional characteristics of these research sites. Implementing these carriers helped me understand which carriers or pillars are most invoked or ignored by members of the research sites. Then I reflected back with the coding developed from the previous procedures (open coding) to synthesize overall data analysis as well as found gaps in institutional model vis-à-vis these research sites.

Qualitative analysis using Atlas.ti : I used a qualitative data analysis software package called Atlas.ti, which is a Cross-Platform Qualitative Analysis Software (CPQAS) that enables the researcher to code and retrieve, build theories, and conduct analyses of data. Various researchers for qualitative analysis purposes have extensively used this software (Foster, 2004; Hwang, 2008; Friese, 2011). It allows working with text, graphics, audio, and video sources and has advanced multimedia capabilities. "It allows the researcher to code the data, retrieve text based on keywords, rename or merge existing codes without perturbing the rest of the codes, and generate visualizations of emergent codes and their relationships to one another" (Zhang and Wildmuth, 2009).

Data collected was entered into a text and saved as PDF file for analysis purposes. All the postings were imported into ATLAS.ti for coding and analysis. Each

posting was coded and themes created based on the careful study of the data as well as codes.

Analyzing effects of Relational Coordination: After identifying institutional practices and roles I examined relational coordination to see how effective they were in anti-cyberhateefforts. The first step in measuring relational coordination is to identify a work process and the second step is to identify the roles or functional groups that are involved in carrying out that focal work process (Gittell, 2011). In my case study, the work process is the ACH efforts and roles or functional groups involved in carrying those efforts are Monitor, Detective, Helper, Enforcer, and Guide. My initial assumption (gatekeeper (monitor), flagger, warner, remover (Admins), and leader (maintainer) was different (Figure 9) than my empirical findings (Figure 10).

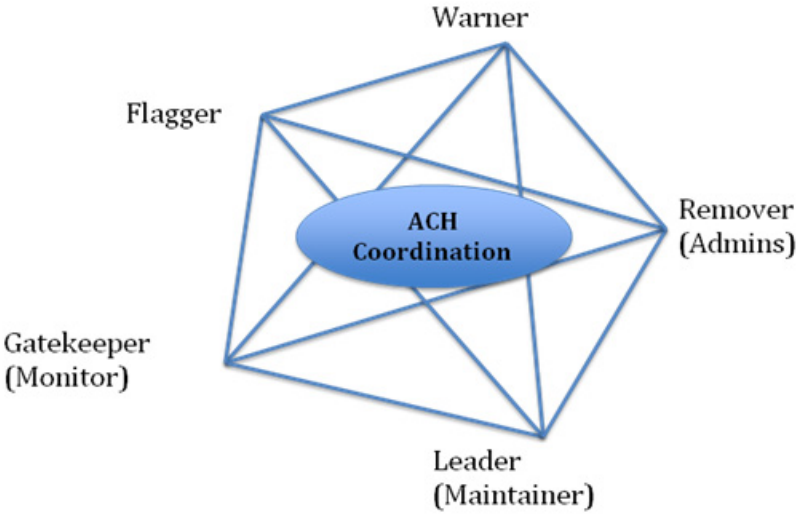

Figure 9: Group Involved in Anti-cyberhate (ACH) Coordination (Initial Assumption)

The initial assumptions of roles were based on literatures as discussed in earlier chapter. The empirical evidences indicated otherwise. For example the detection of troll command center is one such example of role that was not mentioned in these studies. I call this function as "detecting" which was adapted from the work of Subba and Bui (2010). Similarly, "emergent" evidences suggest "monitoring" role and these role monitor as well as give reporting. See example below:

> *XXX XXXXXXX UPDATE: THE ADMINS HAVE AGREED TO RESUME PHOTO POSTINGS UNTIL WHILE WE ARE ON SHIFTS AND WE WILL HALT AGAIN WHEN NO ONE IS AVAILABLE TO MONITOR. WE ARE TRYING OUR BEST TO KEEP THE SITE FREE OF INNAPROPRIATE POSTS. PLEASE ALSO HELP US BY REPORTING ANYONE AND ANYTHING YOU SEE THAT IS DISRESPECTFUL.*

Thus, rather than gatekeeper and flagger the adapted role were monitor. Similarly the role Admin was adapted as enforcer as they could only enforce rules and sanctions. And some one who was helping was termed as helper.

I observed roles/functions and their day-to-day interactions with other roles/functions based on seven dimensions of relational coordination. The seven dimensions and sample questions to use while observing are given in Table 15. These are a priori (Saldana, 2009) top-down categories.

Table 15: Seven Dimensions and Sample Questions Based on Relational Coordination Theory

	Dimensions of Relational Coordination	Question to operationalize functions	Functions/Roles
Of Communication	Frequency	How frequently do they (e.g. Admin) communicate with each of these (functions) about the status of ACH?	1. Monitor 2. Detective 3. Helper 4. Enforcer 5. Guide
	Timeliness	Do they (e.g. Admin) in these (functions) communicate with each other in a timely way about the status of ACH?	
	Accuracy	Do they (e.g. Admin) in these (functions) communicate with other Admin accurately about the status of ACH?	
	Problem-solving	Do they blame or share responsibility when something goes wrong?	
Relationships of	Shared goals	To what extent do people share each other's goals vis-à-vis ACH?	
	Shared knowledge	How much do people in these functions know about the work others do?	
	Mutual respect	Do they respect each other and the work each other do for ACH?	

Gittell (2002) used survey method to gather data on seven functions of medical care providers. However, her survey method was not appropriate for this research. Therefore, a tabulation to analyze the effect of relational coordination was developed as in Figure 16. Responses observed and noted helped me identify the strength of the connections between each individual respondent posting and each of

the identified functions he or she was carrying out about, on each dimension of relational coordination. Once we have such an assessment, we will know where ties are strongest and where they are weakest. I counted the number of incidences of the seven dimensions to themselves and, each function against four other functions. Table 16 is a template to use to measure responses found. Occurrences of these dimensions vis-à-vis five roles were noted. The occurrences are postings indicating seven dimensions of relation coordination. When I found Amin and Member are thanking each other I noted that incident as 1 count of mutual respect. Similarly when I found Member giving name and place of offenders' postings I counted it as 1 incident of problem solving communication. Similarly I calculated the strength of the connections between each of the five functions by calculating the average value he or she was observed about, on each dimension of relational coordination. This resulted, for example, in a score for the frequency of communication between Monitor and Enforcer function, between each Monitor and the Detective function, and so on for each of the functions. The average score offers an indication of the level for relational coordination among members of each function.

Table 16: Template to Note Responses from Roles to Roles

Frequency of Communication	**Frequency of Occurrence**	**Shared Knowledge**	**Frequency of Occurrence**
Monitor		Monitor	
Detective		Detective	
Helper		Helper	
Enforcer		Enforcer	
Guide		Guide	
Timeliness of Communication	**Frequency of Occurrence**	**Shared Goals**	**Frequency of Occurrence**
Monitor		Monitor	
Detective		Detective	
Helper		Helper	
Enforcer		Enforcer	
Guide		Guide	
Accurate Communication	**Frequency of Occurrence**	**Mutual Respect**	**Frequency of Occurrence**
Monitor		Monitor	
Detective		Detective	
Helper		Helper	
Enforcer		Enforcer	
Guide		Guide	
Problem-Solving Communication	**Frequency of Occurrence**		
Monitor			
Detective			
Helper			
Enforcer			
Guide			

I assessed whether ties exist in Site 1 and Site 2 as well as whether I could tell where ties are strongest and where they are weakest. It also helped me identify which dimensions were strong in each Site studied and its effect on the outcome, i.e., ACH coordination to control Cyberhate. According to Gittelle (2011), if all the seven dimensions of relational coordination are prominent then we can say there is an effect of relational coordination on the work process. That means we can confidently argue that the outcome of the ACH coordination is effective, i.e., controlled Cyberhate. The discussions based on data analysis are presented in Chapter 5.

4.4 Justification of Study

According to U.S. Geological Survey, the Haiti earthquake - magnitude of 7.0 (one of the top 10 in 2010 worldwide), which left more than 316,000 dead, 300,000 injured and 1.3 million displaced.[14] The earthquake not only left massive destruction in Haiti, but affected hundreds of Haitian families and their friends around the world, particularly in the US, Canada and France. This event also significantly impacted how people use social media. A massive convergence of people occurred in social networking sites including Facebook.com. One Facebook group alone has more than 460,000 members with a huge number of postings. These trends indicate the emerging impact of Facebook on crisis response. For these reasons, I was prompted to select the Haiti earthquake and Facebook for my study on managing anti-social behavior (for example Cyberhate) during crisis.

Justification for case study methodology: Online communities and ACH are contemporary phenomena. My intention is to understand how anti-Cyberhate occurs, how it is institutionalized and how institutionalization influences online communities. Exploratory case studies, the theory building form of case studies, focuses on current events and concerns and seeks to answer the questions "how" and "why" (Maxwell, 2005; Yin, 2003). Yin (2003) suggests using "the case study method because the researcher wants to deliberately to cover contextual conditions – believing that they might be highly pertinent to [his/her] phenomenon of study". Rowley (2002, p. 18) argues that the "important strength of case studies is the ability to undertake an investigation into a phenomenon in its context; it is not necessary to replicate the phenomenon in a laboratory or experimental setting in order to better understand the phenomena". I aim to uncover the interaction of significant factors characteristic of the phenomenon ACH by concentrating on the phenomenon (Winegardner, 2004). Justification for using case study, as research methodology can be also made as below:

- Institutionalization of online communities is not studied much. ACH behavior is not studied much either. There is lack of theories to explain these phenomena. Eisenhardt (1989, pp. 548-549) argues, "case studies are particularly well suited to new research areas or research areas for which existing theory seems inadequate".
- Case study research is also good for contemporary events when the relevant behavior cannot be manipulated (Rowley, 2002). Cyberhate during disaster is widely recognized as a contemporary issue, which has been proliferated recently due to popularity of social media. And Cyberhatred behavior is difficult to manipulate.

[14] http://earthquake.usgs.gov Last accessed on 04/18/14.

- My research seeks to understand why and how the above-mentioned phenomena occur and how are they achieved. “A how or why question is being asked about contemporary set of events which the investigator has little or no control” (Yin, 2003, p9).

Justification of appropriateness of using Facebook data: Social networking sites are very popular (Gross & Acquisti, 2005). Founded in 2004, Facebook is a social utility that helps people communicate more efficiently with their friends, family and coworkers and has over 1.23 billion monthly active users.[15] Anyone with a valid email address can be a Facebook.com member and can post their status, notes, pictures, messages etc.

The success of such social networking sites has attracted the attention of researchers, from various fields, who use Facebook to collect their data. Gross and Acquisti (2005) had studied information revelation and privacy by collecting data in Facebook. Palen et al. (2007) and Hughes et al. (2008) used Facebook groups to study online convergence behaviors during crisis. Vieweg et al. (2007), using a particular Facebook group, *I am ok at VT*, as their research topic (problem solving activity) has been effective. In the same vein, for my research purpose two Facebook groups are selected to analyze institutionalism of online communities and ACH coordination efforts.

The importance of using Facebook for crisis response is growing in recent years. “With each new disaster, online activity increases by both members of the public and the formal organizations of disaster response” (Hughes et al., 2008, p. 324). Public response time to a crisis or a disaster situation is very small in social media including - within two hours of the shooting incident (Hughes et al., 2008) and within a few hours of the Haiti earthquake (Subba and Bui, 2012).

4.5 Validation of Study Results

Two approaches were adopted for validation of study results. I used data collected from multiple sources like discussion forums and walls of the research sites as well as from other sites relevant to this case study. Denzin (1978, p291) defines this approach as triangulation as “the combination of methodologies in the study of the same phenomenon”. Triangulation is defined as the means to collect information from various sources and it reduces the risk of researcher’s systematic bias (Maxwell, 2005). The reason to collect data from multiple sources was to corroborate the same phenomena as suggested by Yin (2003). If every kind of evidence agrees then I have a confirmatory triangulation according to Gillham (2000). In this study, evidences were collected from observation, Facebook pages, discussion forums, Facebook walls, websites and other documents. All the sources found on the research sites, for example a link to an anti-cyberhatewebsite were also be kept under purview of analysis albeit in a cursory view. According to Yin (2003) data triangulation with multiple sources of evidence will provide multiple measures of the same phenomena addressing the potential problem of validity. Denzin (1978) argues validity and reliability of a study can be increased by triangulation, which is an approach in which multiple forms of data and approaches are used.

The second validation of the study result came from making contrast and comparison (Miles and Huberman, 1994) of the two sites studied. It was found the two case studies are similar in some dimensions but differ in several other dimensions

[15]http://www.Facebook.com/press/info.php?factsheet

provided by theoretical lenses based on Scott (2001) institutional theory and Gitell (2011) relational coordination theory. For example the enforcer role is active in the first case Group EQ1 where as it is passive in the second Group EQ2. Even though the second group's enforcement mechanism was weak in comparison to the first group, its demanding innovation to address enforcement through advocacy was exemplary. The Admins basically executed the role demonstrations in the first group whereas members were active in the second group.

Validation and Atlas.ti: Atlas.ti is one of the popular CAQDASs (Computer Assisted Qualitative Data Analysis Software) that supports in systematic data analysis. With Atlas.ti, I found that the analysis becomes structured and its progress can be recorded for future reference. In terms of validity and reliability, CAQDASs are less useful (Welsh, 2002). To address this issue manual methods of analysis helped as suggested by Welsh (2002) and (Gibbs, Friese & Mangabeira, 2002).

CHAPTER 6: DATA ANALYSIS AND FINDINGS

6.1 Overview

This chapter consists of a summary of key observations and analysis of the cases studied. The framework analysis draws from the evidences found on the cases based on Netnographic method (Kozinets, 2010) with *invisible non-participative unstructured observation research* (Mann and Sutton, 1998; Pollock, 2006) approach. There were two main questions and three sub questions undertaken by this study:

> **RQ1:** How do members of online communities practice or invoke a variety of institutional carriers –from rules, values, power systems, protocols to schemas and IT artifacts – to influence the online communities against Cyberhate?
>
> > **Rq1.1:** How do members of online communities practice or invoke regulative institutional carriers to influence the online communities against Cyberhate?
> >
> > **Rq1.2:** How do members of online communities practice or invoke normative institutional carriers to influence the online communities against Cyberhate?
> >
> > **Rq1.3:** How do members of online communities practice or invoke cultural-cognitive institutional carriers to influence the online communities against Cyberhate?
>
> **RQ2:** How does Relational Coordination mediate the effects of the institutional practices on the online communities against Cyberhate?

6.2 Applying Scott's Framework

As stated in Chapter 1, this study seeks to answer the following research questions:

> RQ1: How do members of online communities practice or invoke a variety of institutional carriers –from rules, values, power systems, protocols to schemas and IT artifacts – to influence the online communities against Cyberhate?
>
> > Rq1.1: How do members of online communities practice or invoke regulative institutional carriers to influence the online communities against Cyberhate?
> >
> > Rq1.2: How do members of online communities practice or invoke normative institutional carriers to influence the online communities against Cyberhate?
> >
> > Rq1.3: How do members of online communities practice or invoke cultural-cognitive institutional carriers to influence the online communities against Cyberhate?

As discussed earlier institutions consist of regulative, normative, and cultural-cognitive structures and activities that provide meaningful social behavior in the Facebook group ecosystem. The Earthquake Haiti group in Facebook was established to help victims in Haiti. It has responsibilities to manage operating the group and keep the forum clean so that members can give and receive information. These responsibilities lie on the Admins who must ensure meaningful social life. As a part of the regulative pillar, the Facebook group formulates rules, regulations, norms based on its roles, values, and purpose of the group (normative pillar). The normative pillar emphasizes that members behave appropriately and are compliant with the expected roles based on the values and norms. Monitoring takes place based on these characteristics and the group ensures their members' behaviors are in compliance with its rules, norms and values. Shared beliefs among the group represents the cultural-cognitive pillar that guides the Admins and members to create an ambience for information exchange that benefits the disaster victims. The Facebook group creates a culture involving members and institutions such as Facebook groups to achieve the concept to help crisis victims through social media.

Drawing upon the evidence from the data, Scott's pillars and carriers are examined. They are described below (Table 17, Table 20 and Table 23).

6.2.1 Regulative pillar

Regulative pillars include rules, laws, regulations, governance systems, surveillance, conformity, sanctioning, rewards and punishments that constrain and regularize behaviors.

Table 17: Scott's (2008) Regulative Pillar and Carriers

CARRIERS	REGULATIVE
Symbolic Systems	<u>Rules, Laws</u> • Facebook rules and regulations: Made and enforce by FB and Group Admins. *Example: http://www.facebook.com/legal/terms* • Group Mission *XXXXX X XXXX Please keep in mind the purpose of this group Before posting: This page has been created as an informational page to allow* *everyone to share general comments, relevant information, to help find family members in Haiti, and guide everyone in donating only to legitimate* *relief organizations.* • Authorizations *FacebookAdmins get authorization from Facebook once they create a group.* • Ownership *Ownership of the group lies in the group creator who also acts as Admin. Creator creates, manages, appoints Admins and can close the group.*

	• Protocols *Creator lies at the apex followed by Admins and then members.* • Code of Conduct *Don't post racially offensive posting.*
Relational Systems	<u>Governance systems, Power systems</u> Governance systems: Widely distributed centralized system with Members, Admins, FB. Admins create rules, enforce them, remind of norms, rules and sanction. Members and Admin can monitor. Power systems: Admins have power to delete, remove, restore. Members have power to warn. The creator and Admins have more power than members. • Admins' relationships *Example: <u>XXXXX XXXXX</u> PLEASE! I would just like to remind everyone who visits -- this* *is a place to share information, kindness, compassion, positive thoughts* *and support. You know the saying...if you don't have something* *constructive or kind to say????.. and I add then say a prayer. Because no* *matter who you are, I pray for you! Blessings!!!* *<u>XXXXX X XXXX</u>Thank you Patty! Very well said and very nicely put .. Thank You ..* ♥ • Delegation of authority *Creator delegated Admin authority by appointing six other Admins.* • Admin-Member relationships *Example: "If there's a person on Facebook who makes your world a better place just because they exist, someone you would not have met without the Internet, post this on their wall.* ♥ ♥♥♥*"* *Example: <u>XXXXXXXXX XXXXXX</u> I would like to say that I am so proud to be part of the admin in this group.* *Everyone in this group is so amazing. I love the comforting words going to people missing loved ones, the prayers for them. It brings tears to my eyes to see how connected we all are. I love all of you.* *XXXX XXXXXXXThank you XXXXXXXXX ! Thank you XXXXXXXX ! Thank you XXXX !you are so amazing!* *You're helping so many people included me! Afer 9 days, I*

	found the family I was looking for IN LIFE because of you!!!!!! *For the ones who are still looking for their loved ones, I will say don't give up.... miracle exist! And people are here to assist and help you! I ..*
Routines	Protocols, SOPs **Protocols:***Two levels of protocols, FB and Admins.* **SOPs:***Admins open/close walls based on their time zone. Immediately flag hatred messages.* • Job schedule *Example: XXXXXXXXX XXXXXX UPDATE: NOTICE, I WILL BE CLOSING DOWN THE SITE AT 11PM (PT) UNTIL THE NEXT ADMIN OPENS IT UP AGAIN.THANK YOU FOR YOUR CONTINUED SUPPORT FOR HAITI.* • Monitoring and reporting *Example: XXXX XXXXXXXX XXX XXXXXXXADMINNNN...1 troll found XXXXX XXXXXXX...please block her.* *XXXX XXXXXXXXX found her, and banned* • Rules of engagement *Example: XXXX XXXXXXXXX ANY insulting pics WILL result in permanent banning* *Example: XXXXX X XXXX Please note - advertisements for your business, attempts to* *get members to vote for you to win a car, offensive comments and allother Inappropriate content will be removed. If you persist you could bepermanently banned. Thank you for continuing to Love and Support Haiti* ♥
Artifacts	Objects complying with mandated specifications Facebook Help Center (Its like a manual). Clauses of FB Terms and Conditions. Profile Page.

6.2.1.1 Regulative symbolic systems

Regulative symbolic systems include Facebook rules and regulations, group rules, purpose of the group, authorization, ownership and protocols. Facebook rules and regulations or terms and conditions are the legitimate regulative pillar of the groups. Facebook's mandates the group creator and Admins to create, manage and close the group. Such officially sanctioned regulative symbolic systems provide ownership to the Admins who can remove abusive posts and remove or ban members[16]. This authorization from Facebook provides a legally sanctioned provision for Admins against the offenders. Such arrangement helps develop self-regulation either by managing issues within themselves or by referring to centralized authority (Baldassarri and Grossman, 2011). However, with increasing membership base

[16]http://www.facebook.com/help/418065968237061/

Admins find coordination and control challenging. Therefore, rationalized formal structures start to develop in this situation (Meyer and Rowen, 1977).

Group Admins have been seen exploiting such legitimacy to meet the purpose of the group and efficiently execute day to day operations of the group. Admins created rules to manage their groups. Some of the stated rules found are presented in Table 18.

They post reminders to members how they should behave in the forums, and what would be consequences of offending. Admins banned or removed offenders and praise members who attacked offenders. This way Admins tried to influence members' behavior. "Regulative processes involve the capacity to establish rules, inspect others' conformity to them, and, as necessary, manipulate sanctions - rewards or punishments - in an attempt to influence future behavior" (Scott, 2008, 52).

Admins warn members if they do not heed to their plea to maintain harmony on the forum they will be removed.

> *XXXX XXXXXXXXX ANY insulting pics WILL result in permanant banning.*
> *XXXXXXXXX XXXXXX PLEASE NOTE THAT ANY OFFENSIVE,*
> *RACIST, OR HURTFUL POSTS IN ANY WAY WILL BE REMOVED.*
> *IF YOU DECIDE TO POST THESE SORT OF THINGS YOU WILL*
> *BE REMOVED, CONSIDER YOURSELF WARNED.*

Table 18: Rules

- Admins inform members about rules from time to time
- Admins should be vigilant
- Defacing the forum is punishable
- Do not use the page as a form of protest against organizations, countries or groups
- Don't be disrespectful
- If you cannot confirm to the group's mission you will be blocked
- Maintain good etiquette at the forum
- Member should behave properly
- Member should not insult other members
- Member should visit info page to know the purpose of the group
- Members need to send request thru inbox msg if they want to be an Admin
- Members should concentrate on the purpose of the site
- Multiple postings of same subject will be deleted
- Nasty, offensive words, articles or pictures, spam, bashing, inappropriate comments are not allowed
- Offenders should leave
- Offenders will be banned, removed and reported.
- Offensive poster should think twice before posting
- Offensive postings will be removed
- Post once only multiple posting are considered spam by Admin
- Remind purpose of the FB page from time to time
- Zero tolerance towards racism

During this some members also play monitor role. They warn, flag, and report any offending postings and offenders. Some members even conduct surveillance to know more about the offenders and confront them. They even post name of the offenders. This tactics of Admins and members can be termed as shaming and shunning as mentioned by Scott (Scott, 2008).

One significant spontaneous rule Admins developed was to close and open the wall when no Admins were monitoring. Initially, it has been seen that they did not give much importance to the rules of engagement though they had posted some basic information on their group profile. At this stage they were loosely bounded in institutional perspectives. They created and posted rules only when their groups was

vandalized or hijacked by offenders at the emergence stage of their life cycle. Unlike formal organizations, this intervention-based rule creation or experiential based is an inherent characteristic of ephemeral or non-binding online groups (Lanzara, 1983). The Admins reacted by creating the "close and open" rule and developing a vigil mechanism to monitor 24 hours. However they were unable to manage their site effectively due to lack of manpower and fast growing postings. They added four more Admins who worked in different time zones to manage temporal coordination i.e. activities synchronization and adherence to schedules (Espinosa et al., 2007). If one Admin in US or Canada closes the wall at night another in France would open the wall few hours later. They were able to control the postings on the wall and keep offensive activities in control. One of such example is presented here.

> *XXXX XXXXXXXXX UPDATE: PLEASE NOTE THAT AT 12 MIDNIGHT (PT) POSTING ON THIS SIGHT WILL BE HALTED UNTIL MY COUNTERPART IN FRANCE RELAUNCHES A FEW HOURS LATER. THIS IS OUR WAY OF SHOWING THE DEVILS THAT VIOLATED OUR SITE LAST NIGHT THAT GOD AND GOOD IS MORE POWERFUL THAN EVIL.*

Admins regularly requested members to visit the info page if they want to know what the mission of the group is. It may be obvious that marketers and solicitors are attracted when a group has a large membership base. However, Admins and members feel that such solicitation postings hinder their objectives. Therefore Admins regularly put notices to inform that no advertisement is allowed on their forums. One such example is presented here.

> *XXX XXXXXXX NOTICE: PLEASE NOTE THAT OUR POLICY IS NOT TO ALLOW ANY FOR PROFIT ADVERTISING ON THIS PAGE REGARDLESS OF HOW SINCERE THE INTENTIONS ARE. WE ARE NOT WELCOMING T-SHIRT SALES, ETC. PLEASE VISIT THE INFO PAGE IF UNCLEAR ABOUT OUR MISSION FOR THIS PAGE.*

From above discussion two types of rule related mechanisms are seen as mentioned by North (1990). The first is formal written rules (for example Facebook terms and conditions and initial group rules) and second is unwritten code of conduct (norms, expectations, values). "Institutions consist of formal written rules as well as typically unwritten codes of conduct and regularized behavior that underlie and supplement formal rules (de Soysa and Jütting, 2007).

6.2.1.2 Regulative relational systems

Relational systems are governance systems that consist of either authority or power (Scott, 2001). "Such governance systems are viewed as creating and enforcing codes, norms, and rules, and as monitoring and sanctioning the activities of participants" (Scott, 2008, p-82). Admins and members monitor the wall, forums and albums to see whether offenders do not comply the rules and norms. When they notice such behavior they immediately activate the rule enforcement process. This is considered as regulative process which includes rule-setting, monitoring, and sanctioning activities (Scott, 2008). Admins' attempt to influence behaviors of members regularly would help develop a patterned behavior, which in the long run gets institutionalized (Przeworski, 1975).

At the apex of the FB group creation is Facebook organization. The Admins have authority and responsibility for group outcome through their objectives and mandates. Admins are delegated authority based on their relationship with the Facebook, their expertise and knowledge to ensure the objectives being reached. To meet the objectives of the group, members also play significant role. They often serve as front line reporters who report any offensive postings and offenders. When they see offensive postings they report to the Admins who may react to take necessary action. Therefore a "regulative relational system" emerges between them (Scott, 2001). The regulative relational systems found in non-binding online groups are:

- Admins relationship
- Relationship between Admins and members

Relationships between Admins and Members with boundary rules and knowing whom to cooperate help self-organized collective action emerge (Ostrom, 2000). In such virtual environment relational systems, governance seems to be the principal carriers of institutional forces (Williamson, as mentioned in Scott, 2008, p. 82).

6.2.1.3 Regulative routines

Regulative routines include protocols and SOPs (Standard Operating Procedure). Though this is a online group, no particular physical hierarchy seems to exist. However, the operating structure creates a protocol among group members. Facebook lies at the apex followed by Admins and then members.

At the emerging stage, no evidences of SOPs of the Group were found on the research site, Admins from time to time posted procedures (Table 19). However as they learned from their experiences they formulated several SOPs. Though these SOPs were formulated during experiential phase, they were invoked considerably during growth and upkeep stage of their life cycle.

Table 19: Standard Operating Procedure (SOPs)

a. New Admin aspirants are screened.
b. Multiple Admins check the wall from time to time.
c. Access to new Admins are granted when clearance are given to them by senior Admins.
d. Admins use time zone difference management to monitor the wall.
   Admins close the wall when they are off from their duty. The wall will be opened by counterpart Admin in another time zone. Admins post notice on the wall about closing and opening of the wall.
e. Members are suggested to use inbox to send offenders names.
   Posting names on the wall and discussion forums make the offender aware that they are being watched. And they would leave the group before any action could be taken.
f. Post reminders about the purpose of the group.
   This SOP is being posted from time to time when members post randomly about their interests rather than the group. This repeated behavior of the Admins may help induce a norm of not posting unwanted information by members. Admins brief about the group, values, norms from time to time which may help institutionalize the members to align themselves with the group.
g. Emergency updates should be posted immediately.
h. Admins should delete any offending messages, postings and photos as soon as possible.

6.2.1.4 Regulative artifacts

Social media artifacts like profile page, profile picture, discussion forums, updates, etc, help in regulation of members' interactions and behaviors, thus creating a governance structure (Hercheui, 2011) in non-binding Online communities. Such regulative artifacts help impose a control mechanism in the non-binding online groups (Mulgan, 1991).

Scott (2001) defines regulative artifacts as objects complying with mandated specifications. Facebook has mandated specifications and guidelines (regulative dimensions) in the Facebook help center[17]. For example, members must be above 13 years of age and need to have a user name and a password. Becoming a Facebook group member is either regulative (controlled) or open (non-regulative). In the first case one can join a group with Admin's approval after sending a request to join (closed group) or by accepting an invitation or being added by a friend (Secret group), whereas in the second case one can join any Open group by clicking "Join".

6.2.2 Normative pillar

The normative pillar includes values, expectations, taboos, roles, conventions, practices, protocols, and traditions.

[17]https://www.facebook.com/help/ Last accessed on 04/18/14.

Table 20: Scott's (2008) Normative Pillar and Carriers	
CARRIERS	**NORMATIVE**
Symbolic Systems	<u>Values, Expectations</u> • Leadership *Example: Admin or group of Admins* *Example: XXX XXXXXXX wrong answer. Should always agree with the admin - LOL. But seriously we are not here to promote hatred - that would make us no better than them. Now let's all get back to praying for Haiti please* • Knowledge of rules and regulations *Example: Member post a message that show they are aware of the purpose of the group. XXXXXXX XXXX Don't waste our time posting offensive comments to getattention. The purpose of this group directed towards the crisis in Haitiand awareness. Furthermore, get the facts before you state something. Askquestions if you must, to be honest, you're probably not the only onewondering. thank you for your support. Keep it up.* *Example: XXX XXXXXXX NOTICE: PLEASE NOTE THAT OUR POLICY IS NOT TO ALLOW ANY FOR PROFIT ADVERTISING ON THIS PAGE REGARDLESS OF HOW SINCERE THE INTENTIONS ARE. WE ARE NOT WELCOMING T-SHIRT SALES, ETC. PLEASE VISIT THE INFO PAGE IF UNCLEAR ABOUT OUR MISSION FOR THIS PAGE.* • Expectations:*Members refrain from posting hatred messages, Admins delete, remove such postings.* *Example: XXX XXXXXXX it was probably facebook that blocked you. we only block for innapropriate posts. we are not the gov't so we reserve the right to censor. dont take it personal, this is about the people suffering in haiti.* *please be respectful at this time.* • Morality *Example: XXXXXX XXXXXXX We help because it is the morally correct thing to do. And as we have all painfully discovered, there are not only immoral people out there, there are people who are simply selfish and self absorbed. Let's choose to focus on the almost 305,000 people who are not.* • Values: *Example: XXXXX XXXXX PLEASE! I would just like to remind everyone who visits -- this is a place to share information, kindness, compassion, positive thoughts and support. You know the saying...if you don't have something constructive or kind to say????..and I add then say a prayer. Because no matter who you are, I pray for you! Blessings!!!*

	• Achieving Admin outcome
Relational Systems	<u>Regimes, Authority systems</u> • Regimes: Online community • Rules and sanctions. • Members expectation of Admn (collective center) to monitor and sanction. Authority systems: Emergent behaviors. • Reporting system Example: Reporting sequence: raise flag (call admin), give offenders' info, request to block, Admin search offender and ban the offender. • System responsibility • Chain of Command
Routines	<u>Jobs, Roles, Obedience to duty</u> **Jobs:** *Admins* **Roles:** *Member, Admin, Monitor, Enforcer.* **Obedience to duty:** Voluntary. • Admin-Member *Group admin can edit the group description and settings, add more admins to a group and remove abusive posts, and remove or ban members.* *Group members are Facebook users. They can post on the wall and discussion forums, send messages to Admins and post photos.* • Admin updates *Example: XXXX XXXXXXXXX ok, group is up.* *Example: XXXX XXXXXXXXX UPDATE: PLEASE NOTE THAT AT 12 MIDNIGHT (PT) POSTING ON THIS SIGHT WILL BE HALTED UNTIL MY COUNTERPART IN FRANCE RELAUNCHES A FEW HOURS LATER. THIS IS OUR WAY OF SHOWING THE DEVILS THAT VIOLATED OUR SITE LAST NIGHT THAT GOD AND GOOD IS MORE POWERFUL THAN EVIL.* • Monitoring, Warning and Action *Example: XXXX XXXXXXXX XXX XXXXXXX ADMINNNN...1 troll found XXXXX XXXXXXX...please block her.* *<u>XXXX XXXXXXXXX</u> found her, and banned.* • Admin *Example: <u>XXX XXXXXXX</u> Great work XXXX!!! You are #1 Police Officer. I will have a name #1 name for everyone soon -LOL.* • Obedience to duty *Example: <u>XXX XXXXXXX</u> Thanks for noticing XXXXXX. LOL. Just trying to keep the wall a safe place for people to share their thoughts and discussions*

	• Information gathering
Artifacts	Objects meeting conventions, standards Photos

6.2.2.1 Normative symbolic systems
Leadership-Membership

The normative symbolic system reflects the values and expectations of actors involved in non-binding online groups (Scott, 2001). The normative elements, i. e. norms and roles, are prescriptive expectations relevant to social order Scott, 2003). Norms are like folkways and mores consist of shared understandings (values and expectation) about behaviors of Leadership - Membership in a group where group members may approve, disapprove, tolerate or sanction, within particular contexts (Sumner, 1907).

The analysis is focused on the roles of Leadership and Membership (Admins and Members). Exhibiting leadership, controlling Cyberhate (e. g., "troll busting" and deleting hatred postings), maintaining social by rule enforcing ("soldiers and police") are values and expectations related to the Admins. Knowledge of norms and rules, compliance (should not post hatred postings), reporting Cyberhaters and postings, and showing respect are values and expectations related to the Members (see Table 21).

Table 21: Normative Symbolic Systems (Values and Expectations) Examples
• Admins and Members • Objective focus • Conformity to group norms • Knowledge of rules • Report offenders and offensive posts • Achieving social order (no hatred postings) • People should not post racist comments during crisis. • Admins should follow the norms they want from their members. • Ubuntu (as African humanism, a philosophy, and as a worldview[18])

Leadership is one of the powerful normative characteristics taken up by the group of Admins in the Group EQ1. They can enforce rules when expectations are not complied. Normative expectations define how roles are supposed to be played. Members expect Admins to lead the group as they perceive that Admins are the leader of the group. One example is presented below. This member posts a statement urging the Admin to be more vigilant. He asks the Admin to clear out members who are meddling to the cause of the group. Members expect the Admins to maintain social order on these non-binding Online groups.

[18]http://pure.au.dk/portal/files/40165256/The_Historical_Development_of_the_Written_Discourses_on_Ubuntu.pdf

MemberXX: Hey Admin, you need to put some extra work on clearing out the idiots who are intent on hijacking a good cause page group.

Folkways/Mores: Some facebook groups use code of conduct posted on the walls and the introduction profile page. Group members are expected by the Admins and other members to follow the group norms. Group norms are not laws, but members are expected to comply. Folkways and mores induces exercise of authority induces in a group (Dowd, 1936) which will be discussed in next paragraph. "The regulations by the mores define the limits, which make anything right" (Sumner, 1907, p. 522). The example below reminds offenders about the purpose of the group and warns to regulate the postings that are unwanted in the group.

XXXXX X XXXXANY comments that are offensive, racist or hurtful in any way - will be removed. Please note the purpose of this group (in the info section) prior to making a comment. The members of this group are here because we LOVE Haiti and want to do whatever we can to help. Thanks ♥

Achieving Leadership effectiveness: Members and Admins were engaged in such activities in the Group EQ1 but only Members were active in the Group EQ2.

6.2.2.2 Normative relational systems

Normative relational systems are those regimes and authority systems that give legitimacy to the activities of non-binding online groups. Admins and Members seem to maintain a number of relational systems based on normative expectations of their self defined job. Apart from the creator, Admins and members joined the group to contribute voluntarily. They have shared interest to help the victims. So they build a normative relational system based on sense of duty and responsibility towards the purpose of the group. Reporting is seen one of the regular ways to maintain normative relational system between Admins and members. Reminder postings by Admins are also seen as a tool to build normative relational systems. All these mechanisms help develop normative expectations among members.

Exercise of authority: "When a crisis arises in a community, some individual, or group of individuals, must decide what to do" (Dowd, 1936, p. 12). The Creator, and/or early Admins "technological leadership" have first mover advantage of ownership and authority of the group (Lieberman and Montgomery, 1988). Example below depicts the Admin's exercise of authority.

XXXXXXXXX XXXXXX PLEASE NOTE THAT ANY OFFENSIVE, RACIST, OR HURTFUL POSTS IN ANY WAY WILL BE REMOVED. IF YOU DECIDE TO POST THESE SORT OF THINGS YOU WILL BE REMOVED, CONSIDER YOURSELF WARNED.

XXXX XXXXXXXXX UPDATE: PLEASE NOTE THAT AT 12 MIDNIGHT (PT) POSTING ON THIS SIGHT WILL BE HALTED UNTIL MY COUNTERPART IN FRANCE RELAUNCHES A FEW HOURS LATER. THIS IS OUR WAY OF SHOWING THE DEVILS THAT VIOLATED OUR SITE LAST NIGHT THAT GOD AND GOOD IS MORE POWERFUL THAN EVIL.

XXXX XXXXXXXXX Earthquake Haiti is not accepting new memeber until further notice..due to the problems we had tonight..

XXXXX XXXXXX Good morning people the wall is open….

These are some examples where the Admin exercises their authority to halt the site, remove offensive postings, not accept membership, and open/close the wall. Members of the Admin group collaborate to regulate or enforce their control mechanism to mitigate the Cyberhate on their site. Regulation is "controlling human or societal behavior by rules or restrictions" (Koops, Lips, Prins, &Schellekens, 2006, p. 81).

Admins of the Group EQ1 established normative relationships via Facebook reporting system to which members also have access. The examples below show that Admins are keen to have a relationship based on their sense of duty.

XXX XXXXXXX I AM THE ADMIN ON DUTY NOW. XXXXXXXX HAS GONE TO BED. PHOTO POSTINGS HAVE BEEN ENABLED AGAIN. PLEASE SHOW RESPECT. WE ARE REPORTING AND DELETING ALL OFFENDERS TO THIS PAGE.

XXX XXXXXXX UPDATE: THE ADMINS HAVE AGREED TO RESUME PHOTO POSTINGS UNTIL WHILE WE ARE ON SHIFTS AND WE WILL HALT AGAIN WHEN NO ONE IS AVAILABLE TO MONITOR. WE ARE TRYING OUR BEST TO KEEP THE SITE FREE OF INNAPROPRIATE POSTS. PLEASE ALSO HELP US BY REPORTING ANYONE AND ANYTHING YOU SEE THAT IS DISRESPECTFUL.

These updates work like a briefing to members when they can post and when they can't. Also they are notices for members to report any disinhibition activities (Suler, 2008). Members can also send messages through the Facebook messaging system.

6.2.2.3 Normative routines

Normative routines are those day-to-day jobs (activities) that are expected of the roles. For example, Admins are expected to remove offensive photos.

XXXXXX XXXX XXXXX PLEASE ADMIN: PLEASE REMOVE INAPROPRIATE PICS ON YOUR PAGE

Some of the examples of jobs found on the sites are presented below:

- Admins should be vigilant
- Remove offensive photos
- Work to remove offenders.
- Policing
- Post updates from time to time
- Open and close the wall

Roles

Illustrations of classification and typologies of social roles observed in Facebook groups are provided below. These roles are adapted from literatures we well as empirical evidences, which suggest these functional roles could help in effective ACH coordination. The functional roles are the monitors, the helpers, the detectives, the enforcers and the guides. These roles are presented below.

The monitors: The monitors observe and review action of others. They admonish, caution, or remind specially with respect to matters of behavior, particularly offensive activities. They give warnings to offenders when offenders ignore the rules of engagement or group norms. The monitors support the enforcers by flagging offending posts. Also monitoring activities are conducted inside the group AOR (area of responsibility).

The helpers: The helpers assist by providing information about offending postings and offenders. They supplement monitors who may be busy monitoring and may not have time to give attention to functions other than monitoring the wall. Moreover, the helpers help the enforcers by raising the alarm or flagging the offenders and the offending posts. Their help may also comes in the form of anti-Cyberhate discussion forum creation and checking offensive photos on the photo albums.

The detectives : The detectives are Netizens who search and investigate about the offenders. One of the major functions of the detectives is *recce*[19] about the offenders, their strength, and territory in order to gain information for ACH purposes. Other observed functions are visiting different places in the Facebook and investigating offenders' profile, likes and friends list. The ACH team members can act against offenders based on the information collected and disseminated by the detectives. The detective activities occur outside the group AOR.

The enforcers: Enforcers are charged with keeping dissident members obedient. Designated by Facebook, they have the most institutional power. Therefore only they can enforce the group rules, for example deleting offending comments and removing the offenders. They warn, block, delete postings, ban offenders and remove offenders. The enforcers are closely supported by the monitors and the helpers. They are labeled as "Police" and "soldier" by other members of the community (see example below).

The guides: The guides show a way by leading, directing, or advising and serve as a model for others. The guides provide moral support to the ACH team members and encourage other members to oppose the offenders and report them to the Enforcers.

Examples of these five roles are presented in Table 22.

Table 22: Examples of the Five Roles.	
Type of ACH Relational Roles	**Examples** *(These examples of postings are presented as it is. No*

[19] Recce – Short form of Reconnaissance i.e. military scouting

	grammatical corrections were made.)
The Monitor	• *UPDATE: THE ADMINS HAVE AGREED TO RESUME PHOTO POSTINGS UNTIL WHILE WE ARE ON SHIFTS AND WE WILL HALT AGAIN WHEN NO ONE IS AVAILABLE TO MONITOR. WE ARE TRYING OUR BEST TO KEEP THE SITE FREE OF INNAPROPRIATE POSTS. PLEASE ALSO HELP US BY REPORTING ANYONE AND ANYTHING YOU SEE THAT IS DISRESPECTFUL.* • *UPDATE: PLEASE NOTE THAT AT 12 MIDNIGHT (ET) POSTING ON THIS SIGHT WILL BE HALTED UNTIL MY COUNTERPART IN FRANCE RELAUNCHES A FEW HOURS LATER. THIS IS OUR WAY OF SHOWING THE DEVILS THAT VIOLATED OUR SITE LAST NIGHT THAT GOD AND GOOD IS MORE POWERFUL THAN EVIL.* • *XXXXXXXX AND I HAVE AGREED TO RESUME THE WALL BUT PUT A HALT ON THE PHOTOS PAGE. WE WILL TRY THIS AND SEE HOW IT GOES. PLEASE CONTINUE TO REPORT INNAPROPRIATE COMMENTS AND POSTS BY REPORTING THESE INDIVIDUALS TO FACEBOOK. THANK YOU.* • *troll alert: Erik Bergman, saying some offensive and racial stuff in the discussions board so dont read it, it will just make you upset but report him. thanks!*
The Helper	• *Please remember to visit our INFO Page and EVENTS Page here on EARTHQUAKE HAITI. Also visit the DISCUSSIONS page. Please report any inappropriate comments or links you may come across and let us know so we can delete them.* • *If you see anything innapropriate please send us the full name and if it is a picture please send us the link (copy and paste full URL to us).* • *HOW YOU CAN HELP EARTHQUAKE HAITI. PLEASE REPORT ALL INNAPROPRIATE COMMENTS BY SENDING US A LINK TO THE COMMENT. PLEASE HELP US CANVAS THE DISCUSSIONS PAGE. WE CAN USE YOUR ASSISTANCE AGAINST IGNORANCE AT THIS TIME.*
The Detective	• *After following some of the trolls who had posted on this thread, I ended up finding one grouphttp://www.facebook.com/group.php?v=wall&ref=mf&gid=117783775772 from which theylaunch their "troll attacks".Several names of the trolls that were active in our group are on their friends' list. AndEarthquake Haiti was mentionned on their wall.*
The Enforcer	• *i deleted all eric bergmans.* • *blocked all 30 of them.* *Please note - advertisements for your business, attempts*

	to get members to vote for you to win a car, offensive comments and all other Inappropriate content will be removed. If you persist you could be permanently banned. Thank you for continuing to Love and Support Haiti ♥ *XXXXXXXXX XXXXXX Thanks Linda!* *XXX XXXXXXX Great work Linda!!! You are #1 Police Officer. I will have a name #1 name for everyone soon - LOL.* *XXXXX X XXXXlol! .. no pressure though eh .. ;)*
The Guide	• *"Please Report the offensive comments. Admin is VERY BUSY and very emotionally involved as well. They do Not have time to read all the posts and could not only miss yours but do not have time to search for those you are talking about. When you see an offensive post - just below it is the word "Report" - click on that and fill in the blanks. It works. Thanks!* ♥*".* • *"Admin is working very hard to keep this group on track. The best We can do when we see inappropriate..or offensive posts is Report them. Please remember that those who are Admins of this group have a Huge job just because of the numbers. That on top of the fact that most have family in the affected area - so it isn't "just a job"..it is Huge. My heart and gratitude go to them...That said .. Best way to deal with those nasties is - Do NOT respond to them and Report them ..just click on the word "Report" below the offensive post. It does work. Thanks!* ♥ *to Haiti* ♥*".*

Obedience to duty

Admins of the Group EQ1 were very obedient to their duty. They were seen working overtime to keep their site clean. They were also seen monitoring the site all the time.

6.2.2.4 Normative artifacts

Scott (2001) defines normative artifacts as objects meeting conventions and standards. Normative artifacts are understood as conventions and standards associated with the way the non-binding online groups are configured. In the level of specifications (design features) creator have more controlling power but they may delegate their power to Admins. The delegation is (normative) and creator has special powers (regulative) (Hercheui, 2011). In the closed non-binding online groups the convention is that - Admins can accept or reject Facebook users' request for Group membership. In open group one can become a member bypassing this control convention.

6.2.3 Cultural-Cognitive pillar

The cultural-cognitive pillar includes shared convictions and frames that give a perception about the world and its meaning. It includes beliefs, mental models, categories, identities, schemas, and scripts.

Table 23: Scott's (2008) Cultural-cognitive Pillar and Carriers

CARRIERS	CULTURAL-COGNITIVE
Symbolic Systems	<u>Categories, Typifications, Schema</u> • Categories: Social categories e.g. Admins and Members • Typifications: *Troll Busters* • Schema *Admins have more power than Members.* *Members follow rules and Admins enforce rules.*
Relational Systems	<u>Structural Isomorphism, Identities</u> Structural isomorphism: Identities: Social identities. Admins exhibit a common identity to show that they are the decision makers. • Lessons-learned • Protecting the Group's interest • Internal control
Routines	<u>Scripts</u> **Scripts:** *FB posting format* • Group Advocacy *Example: XXXXX XXXXXXX we all are with you and let everyone join hands to serve* *our brothers and sisters let us help from individual to organization level* *serving mankind is real service to lord .... please join this missionhelphaiti...*
Artifacts	<u>Objects possessing symbolic value</u> Updates Profile Picture

6.2.3.1 Cultural-Cognitive symbolic systems
Categories and Typifications

Admins and members were attracted to participate in Facebook due to common interest on the earthquake in Haiti. Over a period of time number of Admins and Members increased and so did their interactions. Thus, despite becoming netizens logging in from different parts of the world and bringing different cultures, they became involved in anti-Cyberhate activities, eventually developing common understandings and shared beliefs (Scott, 2003). Consequently, a group of anti-Cyberhaters formed and how to control Cyberhate became understood. Thus, the category of Admins and Members amalgamated to form a shared typification. Two such examples are "troll busters" and "Racism in Schism".

*XXXXX X XXXX: Note - there is much great information under Discussions as well as on this wall. Also *** ANYONE posting nasty, offensive words, articles or pictures, Advertisements, spam, bashing - Anything in appropriate to the purpose of this group - Your posts WILL be removed and You Will be banned. Thank you for continuing to Love and Support Haiti* ♥
XXXXX XXXXX: Go Linda!!
XXXXX X XXXX: lol Patty - we (admins) are taking turns .."Trollbusters" ;)
XXXXX XXXXX Who ya gonna call -- "Trollbusters"! :)
XXXXX X XXXX: zactly ! lol

Schema

Due to Facebook group structure the "taken for granted" (DiMaggio and Powell, 1983) notion is that only Admins can enforce rules. For example only Admins can remove offensive postings. Thus, Admins have more collective decision making power than Members, which Hercheui (2011) termed as hierarchical schemas.

6.2.3.2 Cultural-Cognitive relational systems

Cultural-cognitive relational systems consist of structural isomorphism and identities that make actors in the group similar to each other (DiMaggio and Powell, 1983). Admins and members of the EQ 1 group define their identity, perceived roles, responsibilities and authority through a cultural cognitive relational system. All the Admins seem to behave in the same way and exhibit similar identities. Admins are seen trying to maintain good relationships with each other. They exhibit shared belief about Cyberhate control (Kunda, 1992). They try to ensure that the perception of control is prevalent among the group members. They exhibit idiosyncratic behavior (Williamson, 1979) of attacking offenders. Moreover, Admins have a relationship with members who perceive that Admins must be vigilant against Cyberhate. This expectation forces Admins to react to any offending posts and offenders as soon as possible. In return, Admins also expect members to report any untoward incident. In this way, the cultural-cognitive relational system tend to influence governance of Admins and Members in the group (Williamson, 1979).

6.2.3.3 Cultural-Cognitive routines
Scripts

Schank and Ableson (1977, p. 210) contend "a script is a predetermined, stereotyped sequence of actions that defines a well-known situation". Institutions are enacted through scripts that are "observable, recurrent activities and patterns of interaction characteristic of a particular setting" Barley and Tolbert (1997, p. 98). Admins and Members, while executing their roles, are guided by cultural-cognitive routines that are characterized by scripts (Scotts, 2008). My data analysis on interaction patterns (Barley, 1986) suggests Admins and Members follow a sequential model of decision-making (see Table 24). The first sequence was brief-inquire-instruct-execute and second sequence noted was brief-report-enforce.

Table 24: Decision-making Sequence

Brief-Inquire-Instruct-Execute		**Brief-Report-Enforce**	
Admins inform members to ask for help if needed.		Admins asks Members to inform about hatred offenders and their postings.	
Members inquire about an appropriate course of action when they see hatred postings.		Members inform about hatred offenders and their postings.	
Admins provide Members with an answer (for example to click report button).		Admins remove the offender and their postings.	
Members act as instructed.			
Example: *Admin: want help getting your pic up Xxxxx? .. one samename to another.. pm me and I'd be happy to walk you through it ..* ♥ *Xxxxx: Admin.....just sent you a plea for assistance in your inbox but i have to leave work so I will do this in the morning.....thanks for your help!* *Admin: no problem Xxxxx - I will send you a note with 'easy' instructions .. we'll see your candle tomorrow :)*	Briefing Inquiring Instruction Execution	**Example:** *Admin: PLEASE REPORT ALL INNAPROPRIATE COMMENTS BY SENDING US A LINK TO THE COMMENT.* *XXXX XXXXXXXX XXX XXXXXXX: ADMINNNN...1 troll found XXXXX ...please block her.* *XXXX XXXXXXXXX found her, and banned*	Briefing Reporting Enforcing

Xxxxx: okie dokie, thank youl Xxxxx *Admin: np Xxxxx :)*			

Being a vigilant is a behavioral routine for Admins. This behavior becomes a routine due to members' expectations. Members are also perceived to report any offensive postings. It has been seen that members report such incidents to Admins. So, one of the habitualized routines of members is to report to Admins and that prompts Admins' day-to-day behavior. When the actors (Admins and Members) behave according to the script, the institution is enacted (Bjorck, 2004).

6.2.3.4 Cultural-Cognitive artifacts

Scott (2001) defines cultural-cognitive artifacts as objects possessing symbolic value. For example in non-binding online groups profile picture is a cultural-cognitive artifact. The Group EQ1 used a specific profile picture (painted crying face with Haiti's flag on a person's cheek) which exhibited their feelings, use as a tool to raise awareness about the issue and act as their support or helping identity.

XXXXXXXXXXXXXXXXXXXX XXXXX What an amazing profile pic for this group! My thoughts are with the people of Haiti.
XXXXXX XXXXLet's support Haiti and bring more awareness by changing our profile pictures to something that depicts what's going on there!! Spread it around. And repost to ur pages!!!
XXXXX XXXXLet's all change our Facebook profile pic to show our support!!!
XXXXXX XXXXXXCopy this profile pic and change yours. Then ask others to do
the same !

Similarly, Facebook updates are one of the other symbolic artifacts characterizing the Groups. The updates regulate members' behavior. For example, when the wall is closed they can not post and when it is open they can. Moreover, regular postings of code of conduct ("a function that must be continually exercised" (Ross 1896, p. 521)) help control offensive behaviors.

6.2.4 Summary

My analysis suggests that regulative pillar and normative pillar are most invoked in EQ1 group. Particular characteristics are present in institutional elements that were invoked. For example rules of engagement were emergent, standard operating procedures (SOPs) are spontaneous and protocol is constrained by Facebook design. Conformity was expected with compliance to the rules of engagement in self-governance system where division of work is executed by geographically dispersed roles. Champions were either Guide or Restavek in EQ1 and Advocacy in EQ2. Members were wither countering the offenders or just ignoring them. The offenders adopted new strategy which I called JAD (Join, Attacj and Dejoin). Offenders join the group EQ1 and post hatred messages and unjoin themselves before Enforcers could block them. In this way they were able to keep their Facebook account uninterrupted.

Table 25: Institutional Characteristics in Group EQ1 and Group EQ2

Institutional Elements	Group EQ1	Group EQ2
Group Rules, SOPs	Explicit	Implicit
Delegation of authority	Yes, recruited 7 more	None
Recruitment policy	Reputation, active participation and background check	None
Protocols	Followed	Not followed
Code of conduct	Enforced by Admins, Coerce compliance	Not enforced by Admin, semi-coerce compliance
Governance system	Effective Self-governance	Ineffective Self-governance
Power system	Admins exercised power	Admin did not exercise his/her power.
Admin-Member relationship	Relational	Non-relational
Job schedule	geographically dispersed	No job schedule
Notice posted by Admin	Updated at least twice daily	None
Roles	Effective ACH roles	Ineffective ACH roles
Reporting system	Member-Admin & Admin-Member, Member & Admin to FB	Member-Admin only, Member- FB only.
Leadership	Collective, 10 Admins	Single, Emergent advocacy leadership
Members expectation of Admin (collective center) to monitor and sanction	Fulfilled	Unfulfilled
Achieving Admin outcome	Effective	Ineffective
Admins identity	Group, common, shared "Troll busters"	Single
Artifact (Profile Picture)	Shared	Disputed

The data analysis suggests that unlike the EQ1 group, EQ2 was organized differently in terms of institutional process. Group EQ2 had only one Admin in spite of having more membership base of more than 460,000 in comparison to EQ1's 10 Admins for nearly 350,000 members. The Admin of EQ2 had no visible relationship with Haiti unlike 3 of the Admins of EQ1. Admins of EQ1 created SOPs and rules of engagement but Admin of EQ2 didn't. Group norms were demanded in both the groups. Findings of the above discussion are presented in Table 25.

Drawing upon data from the Netnography of the case study, this study confirmed that non-binding online communities exhibit institutional characteristics. This longitudinal explorative case study of the two cases found considerable evidence to suggest that the institutional pillars and carriers are considered as legitimate and sanctions mechanisms by Admins and Members in counter Cyberhate in non-binding online communities. However they are found to differ in terms of utilization of

institutional carriers for their sustainability particularly at the decline and mitosis stages of life cycle even though their invoking and coordination have matured.

Table 26: The Most Visible Institutional Elements in Anti-cyberhate Coordination

Regulative	Normative	Cultural-Cognitive
Prominent regulative symbolic systems: **Groups Rules/norms and Mission of the Group**	*Prominent normative symbolic systems:* **Leadership**	*Prominent Cultural-Cognitive symbolic systems:* **Troll-busters**
Prominent regulative relational systems: **Relationship of *Member and Admin***	*Prominent normative relational systems:* **Authority and Reporting**	*Prominent Cultural-Cognitive relational systems:* **Isomorphisms Admins' Common Identity**
Prominent regulative routines: ***SOPs (Updates)***	*Prominent normative routines:* **Roles and Jobs (Enforcer and to enforce rules)**	*Prominent Cultural-Cognitive routines:* ***Anti-hate advocacy***
Prominent regulative artifacts: ***Profile Page.***	*Prominent normative artifacts:* ***Photos***	*Prominent Cultural-Cognitive artifacts:* ***Profile image (picture)***

The analyses of individual carriers within the three pillars provided further insights into the nature of the differences in two groups. For example, case one (EQ1) was found to be more active in invoking institutional elements (e.g., rules) than case two (EQ2). The most visible institutional elements in anti-Cyberhate efforts found are summarized below in Table 26.

6.3 Relational Coordination and Anti-cyberhate Coordination

RQ2: How does Relational Coordination mediate the effects of the institutional practices on the online communities against Cyberhate?

The question above is answered by measuring relational coordination by surveying members' responses in ACH work process about their communication and relationships with other members in ACH work process. To supplement this measurement five functional roles for ACH process are identified, defined with examples and are presented here. Moreover, in this chapter, relational coordination studied in the two groups EQ1 and EQ2 is discussed and with a comparison approach relational coordination in EQ2 is highlighted. This chapter concludes with empirical examples of effective relational coordination against Cyberhate.

6.3.1 Relational roles in ACH coordination

The first step in measuring relational coordination is to identify a work process and the second step is to identify the roles or functional groups that are involved in carrying out that focal work process (Gittell, 2011). In this case study the work process is the ACH coordination, and roles or functional groups involved in carrying out that coordination effort are identified (see Figure 9).

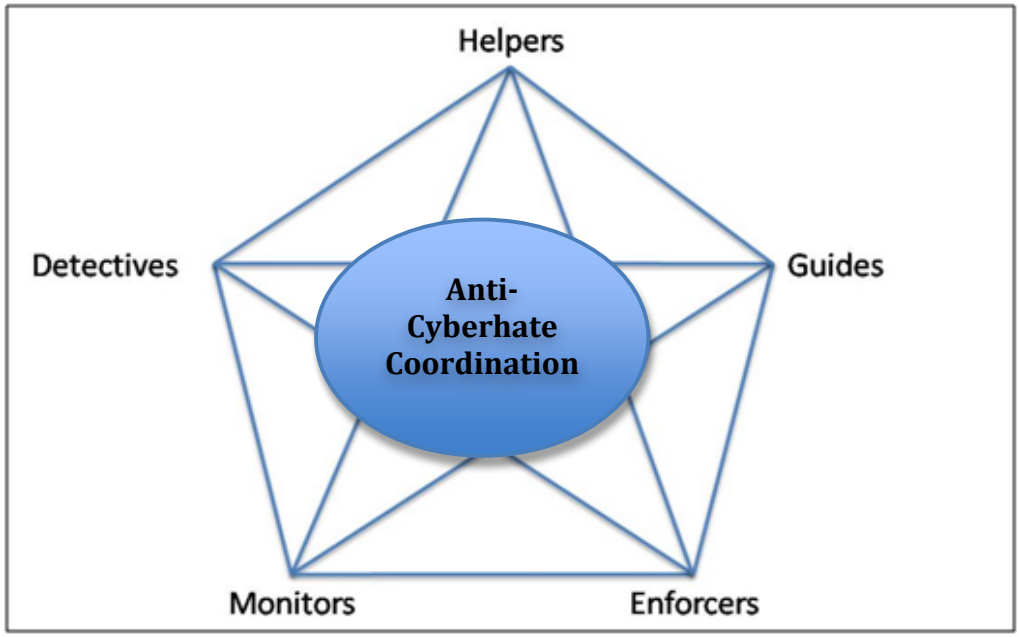

Figure 10: Relational Roles by Emergent Responders in Anti-cyberhate Coordination

The example below shows how these members can bring desired outcome of blocking offenders.

Member responses	Type of member
Bernard Abujaber BLOCK : XXXX XXXX	Monitor
XXXXXXXXX XXXXXX Told admin	Helper
XXX XXXXXXX done	Enforcer
XXXX XXXXXXXX XXX XXXXXXXXXXXXXXXX thanks for your help.	
XXXXXXXXX XXXXXX yeah	

The monitor flags the offender by providing offender's name and asks to block the offender. The helper informs the monitor that information regarding the offender has been sent to the enforcer. Within a minute the enforcer blocks the offender. The tandem working of these functional roles bring in a successful ACH coordination.

6.3.2 Applying Gittell's Relational Coordination Theory

RQ2: How does Relational Coordination mediate the effects of the institutional practices on the online communities against Cyberhate?

The next step of the analysis uses Gittell's framework of relational coordination, as adapted in the methodology chapter. According to Gittell (2011) relational coordination is measured by surveying members in ACH work process about their communication and relationships with other members in ACH work process. However as I mentioned in the methodology chapter I could conduct a survey because contacting the members of the Facebook group was not possible due to my non-participative ethnography approach. In response to this limitation, I came up with an alternative approach to study the ACH work process. I observed group EQ1 and noted the responses that helped identify strength of connections between individual respondents working for the ACH work process.

Occurrences of priori codes based on relational coordination dimensions vis-à-vis five roles were noted. The occurrences are postings indicating seven dimensions of relation coordination. For example When I found Amin and Member are thanking each other I noted that incident as 1 count of mutual respect. Similarly when I found Member giving name and place of offenders' postings I counted it as 1 incident of problem solving communication. Then I calculated the strength of the connections between each of the five functions by calculating the average value he or she was observed about, on each priori codes of relational coordination. This resulted, for example, in a score for the frequency of communication between Monitor and Enforcer function, between each Monitor and the Detective function, and so on for each of the functions. The average score offers an indication of the level for relational coordination among members of each function. A score of frequency between each function were noted and are presented in Table 27.

Table 27: Frequency of Dimensions of Relational Coordination		
Dimensions of relational coordination	Analytic questions	Values (in %)
Frequency of Communication	How frequently do they communicate with each of other about ACH?	33.7
Timely Communication	Do people in these groups communicate with each other in a timely way about ACH?	7.4
Accurate Communication	Do people in these groups communicate with each other accurately about ACH?	8.5
Problem Solving Communication	When a problem occurs with ACH, do the people in these groups work with each other to solve the problem?	10.5
Shared Goals	How much do people in these groups share each other's goals' regarding ACH?	12.3
Shared Knowledge	How much do people in each of these groups know about the work each other do regarding ACH?	8
Mutual Respect	How much do people in these groups respect the work each others' do regarding ACH?	19.6

This approach helped me to identify where ties are strong and where it is weak. It was found that the frequency of communication between the functional groups is highest (i.e., 33.7%) and timely communication is lowest (i.e., 7.4%). The low value of timely communication was obvious as the Admins were working in different time zone and basically in asynchronous mode. Frequency of mutual respect and shared goals stands at 19.6% and 12.3% respectively.

Analyzing the patterns of relational coordination found between different functional groups can help understand relational coordination ties in ACH work process. Empirical data helped build a matrix diagram (Steward, 1981; Sosa, Eppinger et al, 2003; and Gittell, 2010) to visualize patterns of relational coordination between functional groups in the ACH work process.

Table 28 is a matrix diagram that was created for the case study EQ1.The empirical evidences suggest relational coordination ties for EQ1 is symmetrical meaning that the same functional groups are represented along the left hand column and along the top row. This matrix diagram shows patterns of relational coordination with Detectives, Enforcers, Guides, Helpers and Monitors. When these functional groups have a relation to each other I noted the presence of relation by Figure 1. The figure 1 represents that they communicated to each other. Similarly absence of interaction was represented by Figure 0. The binary combination was used to indicate presence or absence of communication between these functional roles.

Table 28: Symmetrical Matrix of Relational Coordination Ties (EQ1)					
	Relational Coordination Reported With				
	Detectives	Enforcers	Guides	Helpers	Monitors
Detectives	1	1	1	1	1
Enforcers	1	1	1	1	1
Guides	1	1	1	1	1
Helpers	1	1	1	1	1
Monitors	1	1	1	1	1

Unlike EQ1, the second case study EQ2 had asymmetrical relational coordination ties. Asymmetrical matrix in EQ2 means no relationship exists between different functional groups.

Table 29: Asymmetrical Matrix of Relational Coordination Ties (EQ2)					
	Relational Coordination Reported With				
	Detectives	Enforcers	Guides	Helpers	Monitors
Detectives	1	0	1	1	1
Enforcers	1	0	1	1	1
Guides	1	0	1	1	1
Helpers	1	0	1	1	1
Monitors	1	0	1	1	1

In the case of EQ2, enforcer was a single person which was not observed to interact with any of the members. Therefore his interaction with other members remains zero. It can be seen from Table 29 that the enforcer had no coordination with other functional groups. The 0 represents lack of ties among the functional groups. This happened because the enforcer never had a communication with any of the remaining functional groups in case of EQ2. The enforcer neither created rules of engagement nor implemented the emergent rules.

In sum, these two matrixes suggest that relational coordination ties are present in EQ1 and EQ2. However enforcement in EQ2 is absent unlike in EQ1. We close this chapter by that relational coordination does exist in the cases studied.

6.3.3 Discussion on relational coordination

As discussed earlier, Gittell's (2002) relational coordination does not focus on relationships between participants, but focuses on functional groups or roles of participants. Gittell's (2011) theory of relational coordination postulates that effective coordination occurs through communication that is frequent, accurate, problem solving, timely and supported by members' high-quality relationships - characterized by shared goals, shared knowledge, and mutual respect. These relationships help build a collective identity i.e. anti-Cyberhate and are essential for coordinated collective action, i.e., anti-Cyberhate efforts (Gittell, 2005).

Using examples from group EQ1 case study, this section covers how relational coordination occurs and how social order is contained. Relational coordination is about relationships between, for example, the monitors and the enforcers when a

Cyberhatred message is posted. The monitors observe and audit the offending postings. Then the monitors warn against the offending behavior, which needs to be addressed by the Enforcers. See two examples below:

XXXX XXXXXXXX XXX XXXXXXXADMINNNN...1 troll found XXXXX XXXXXXX...please block her.
XXXX XXXXXXXXX found her, and banned

XXXX XXXXXXXX XXX XXXXXXXPlease people report 2 users XXXXXX XX XXXXX ..... and.....XXXXXXXX XXXXX. They are two heartless Mo fos.
XXX XXXXXXX Thanks so much - he has been blocked and the post deleted.

The monitors and the enforcers may not know each other but show a relationship based on the roles they play. The helpers could assist them by post names of the offenders. The helpers help the enforcers by flagging and reporting about offending postings and offenders. As they can not remove the postings they have to inform the Enforcers to remove any offensive postings and the offenders. The enforcers were seen deleting such postings regularly. See example below:

Members responses	**Type of Members**
XXXXXX XXXXXXXX: BLOCK : XXXXXXXX	Monitor
XXXXXXXXX XXXXXX : Told admin	Helper
XXX XXXXXXX: done	Enforcer
XXXX XXXXXXXX XXX XXXXXXX : stephanie thanks for your help.	She is one of the monitors.
XXXXXXXXX XXXXXX: yeah	Helper

As in the example above, actors' anti-Cyberhate response time was faster because enforcement occurred within a minute of monitor's flagging. Their work on enforcement has been effective when they have prior information about the offender provided by the monitor. As said earlier, the monitoring activities occur inside the group and detective do surveillance outside the group. By consolidating their institutional elements the ACH team members were able to develop this effective ACH mechanism from loosely bound to mature phase.

Detectives are Netizens who search for offenders and investigate about the offenders. In several instances the detectives followed the offenders when the offenders started to post offensive messages on the discussion forums. During one of the chases a detective discovered, see example below, a Facebook group called "Troll Command Center" from which the offenders used to launch attacks on the Haiti Earthquake groups.

XXXXX X. XXXXX wrote on January 21, 2010 at 5:15pm
After following some of the trolls who had posted on this thread, I ended up finding one group
http://www.facebook.com/group.php?v=wall&ref=mf&gid=117783775772 from which they launch their "troll attacks". Several names of the trolls that

were active in our group are on their friends' list. And Earthquake Haiti was mentionned on their wall.
Since you are filtering the new members, it might help to compare the names with their list. I know it's a lot of work but maybe it will help a little bit.

The detective provided a link of the troll group. Moreover, the detective did a profile search and collected detail information of the offenders. Providing such accurate information helps build relational coordination according to Gittell (2011). The detective found that several of the offenders that were active in the group are on offenders' friends list. Earthquake Haiti group was one of the targets as mentioned on the troll group wall. The detective then suggested that the enforcers do a background check (of the new members) by comparing with the names of the suspects found on the troll command center and offenders' friends list. The detective's information is a problem solving communication for the Enforcers. According to Gittell (2011) problem-solving communication helps actors in their work. However, working together is not an easy task. The different members of the ACH team need guidance from time to time. The guides tell members how to help each other. For example the guides teach the technique to report the offenders. The guides also support the enforcers and suggest members to help by reporting. They also suggest not to respond to offenders but rather to report to the enforcers i.e. a problem solving communication.

XXX XXXXXXX We do apologize that there are a few evil/ignorant people posting comments that we do not need at this time bc they are insensitive to the gravity of this catastrophe. If you see anything innapropriate please send us the full name and if it is a picture please send us the link (copy and paste full URL to us).

During such interactions members of the ACH team were seen thanking each other. This implies that they show mutual respect while working with shared goals as a member of the ACH team (Gittell, 2011). For example their effort to close down the troll command center was successful. This suggests that their working together brought a quality and efficient outcome. Following aspects were seen as contributing to the successful management of EQ1:

- Communication between members of ACH team is high.
- They have timely and promptly responses.
- They provide information correctly.
- They teach each other how to solve problems.
- They have shared goals of controlling Cyberhate.
- They share their knowledge.
- They respect each other by not blaming each other.
- Verification of information provided before deciding enforcement action.

According to Lanzara (1983), physical ephemeral group members have self-prescribed roles. This phenomenon seems to parallel also in non-binding online groups. Moreover, it was noted that some of these functional roles are overlapped, i.e., other members of the ACH team could interchangeably execute some of these roles. For example a member could play a role of the helper or the monitor. This interchangeability of job may not be possible in physical organizations. However, it is

possible in online communities like open Facebook groups or TappedIn due to technology and informal organizational setup. In organizational context one member may not be able to play other's role due to limitations in knowledge or strict rules. But in Facebook this does not apply. However, members other than the Admins can not execute an enforcing role. Interestingly, the Admins who are at the apex took privileges to do as they see fit. They could be the helper or the monitor or the enforcer.

6.3.4 Comparing group EQ1 and group EQ2

Relational coordination in the two groups studied are different. Admins of EQ1 created SOPs and rules of engagement to prevent and control offensive messages on their forum. On the other hand, no empirical evidence was found regarding EQ2 Admin's responses against Cyberhate. The Admin of EQ2 neither created any rules of etiquette nor enforced any control against hatred offenders and offensive messages. The Admin was not seen responding to any of the flags raised by the members when someone posted hatred messages. These responses are self-explanatory.

> *XXX XXXXXX All my friends and myself have been reporting this since yesterday and it STILL hasnt been deleted by Facebook...they should be ashamed of themselves!!!!!!! (Posted on February 3 at 12:39am)*

Internal communications in these groups were also dissimilar. EQ1 Admins posted their notices at least twice a day and responded to members call indicating that EQ1 had effective internal communication for active engagement of members (MacLeod and Clarke, 2009). The Admin was insensitive to the concern of members in EQ2. For example members asked to remove the EQ2's profile picture as they thought the profile picture was racist and disrespectful. However the Admin neither disputed nor removed the picture. Realizing the absence of Admins responses to hatred posting some members started to draw his attention. Member urged the Admin to be more vigilant.

> *XXX S. XXXXX Hey Admin, you need to put some extra work on clearing out the idiots who are intent on hijacking a good cause page group. (Posted on February 4 at 11:54pm)*

Except for the Enforcing function, all other four functions were found to be present in EQ2. Due to the lack of enforcement, the offending messages were rampant on this site unlike EQ1. Seeing the increase in racist comments some members wanted this Facebook group to be shut down.

> *"Dis group sud b shut down to many fcked up racist cunts on here n d lilcntssud b rported 2 fb n d police as racisem is a cream n evntho u make fake acount 2 hide ur sad slfscuz u 2 scared ur pc cn b traced u fools."*

That means the outcome was not desirable in terms of institutional perspectives in the Group EQ2. Moreover members' motivation to report the offenders was also on the lower side. Unlike in EQ1 the relationship quality in EQ2 is low and blaming was high i.e. disrespect among members. The members of EQ2 were executing functional goals rather than shared goals. Functional roles found on EQ2

are not effective because relational dimensions (as informed by Gittell, 2011) are absent in EQ2.

In-group EQ1 members of the ACH team worked together. However in EQ2 members seem to be divided into bipartisan topic. Some members felt the title of the EQ2 "EARTHQUAKE HAITI APPEAL PLEASE JOIN EVERY CLICK WILL FEED A CHILD, INVITE!" is dubious unlike others who felt it was creating awareness (see examples below).

" WHAT THE FUCK IS THIS!? HOW WILL JOINING YOUR GROUP BENEFIT ANYONE IN HAITI. ARE YOU SERIOUSLY SUGGESTING THAT YOU HAVE THE FUNDS AND RESOURCES TO SEE THIS COME TO FRUITION? YOU DON'T EVEN HAVE ANY INFO ON YOUR FACEBOOK ACCOUNT. YOU'RE EXPLOITING A TRAGEDY TO GET YOUR 15SECONDS OF "FAME" AND MAKE YOURSELF LOOK GREAT. >> >>>>>>>>>>>>>>>>>>

"how will every click feed a child? it cant, doh, you'd be better off putting your time into making something happen if you care about it enough. sure, it raises awareness but look around, its a page of spam so im leaving.whydont you do something if thats how you feel then, bit hiporcritical? bit dumb to.

The findings suggest that the first case had positive mutual reinforcement in ACH work process unlike the second case where mutual reinforcement was negative (Gittell, 2011). Table 30 shows factors that brought in negative mutual reinforcement in EQ2.

Table 30: Mutual Reinforcement in ACH Coordination

Group EQ1	Group EQ2
Repeated interactions	Lack of repeated interactions, lack of responses
Communication is delayed at times	Delayed communication
Frequent updates at least twice daily	No updates
Joint problem solving	Blaming, disrespect
Mutual respect is very high	Conflict
Shared goals	Bi-partisan
Shared knowledge as all of the members knew each other	Functional goals rather than shared goals
Strong group member relationships as 10 of them were recruited as Admins	Lack of shared knowledge as they don't know who is doing what
	Sub-goal optimization (suboptimization)

The outcome in terms of controlling cyber hatred with the activation of institutional processes in EQ1 was higher than EQ2. The members of ACH team in EQ1 successfully invoked a variety of institutional carriers - from rules, values, power systems, protocols to schemas and IT artifacts - to influence their community.

Moreover, they exhibited high quality relationships and communication mutually reinforced by seven dimensions of relational coordination. Due to active relational coordination in EQ1 its output was much more efficient than EQ2. The outcome of the coordinated mechanism was effective. Their relational coordination brought the desired result. This is also confirmed by one of the active helpers who wrote that better security had prevailed on the forum.

> *" I do hope this board has been more calmer and useful as admin has implemented better security..new board commers will be screened before gaining access due to the recent rash of derogatory pics and postings..".*

In sum, the ACH work process does not seem to be effective in EQ2 unlike in EQ1.

6.3.5 Summary

The theory of relational coordination states that the coordination of ACH work is most effectively carried out through frequent, high quality communication and through high quality relationships (Gittell, 2011). She further argues that relationships of shared goals, shared knowledge and mutual respect support frequent, high quality communication and vice versa. The case study seems to corroborate with her theory. These dimensions should work together to enable members to effectively coordinate their ACH work. Based on the above discussion example of effective relational coordination found on the case study EQ1 are tabulated below (Table 31).

Table 31: Examples of Effective Relational Coordination.

Dimensions of relational coordination	**Types of Functional Role**	**Explanation** *Orange: Relational Coordination* *Green: Institutionalization*	**Members responses** *Blue: ACH member* *Red: Offender*
1. **Shared knowledge** 2. **Problem Solving** 3. **Accurate communication**	Monitor to Enforcer	1. Ability to identify offender and prior knowledge how to inform. 2. Coordinating with Enforcer to block the offender. 3. Providing offender's name and location. 4. Expects Enforcer to block the offender. Monitor follows **SOP - report** Enforcer - provide information about offender by giving name and location.	*Xxxxxx XxxxxxM: Xxxx Xxxxxx is cropping up on the discussion boards with his evil messages. He needs to be blocked. Thank you.* *17 Jan at 4:35pm Comment Like Report 2 people like this.*
1.**Shared goal**	Enforcer to Monitor	1. Enforcer shares Monitor's goal regarding	*Enforcer XXXX13: I blocked him and*

2.**Problem Solving** 3.**Timely communication**		ACH (to block offender). 2. Ability to identify offender and prior knowledge of required action. 3. This action of blocking happened with in 2 minutes of Monitor's reporting. 4. Enforcer expects Members to report offenders. Enforcers **complies** and **enforces** his **authority** to block the offender. Second Enforcer uses **"graduated sanctions"** (Ostrom, 1990) approach. And they **report** back too. Monitor's **expectations** fulfilled.	*reported him he keeps coming back.* *17 Jan at 4:36pm* *Report* *Enforcer XXX3 I deleted all xxxx xxxxxxs. Just report them.* *17 Jan at 4:37pm* *Report*
1. **Mutual respect** **2. Frequency of communication**	Helper-Monitor-Enforcer-Detective-Guide	1. Share goal to report 2. Monitor and Enforcer respect the work each others' do regarding ACH. 3. Communication between Monitor and Enforcer is high. **Roles.** **Jobs.** **Obedience to duty.**	*Xxxx8: Let's unite and report this scam bag.* *17 Jan at 4:37pm* *Report* *Enforcer XXXX13: yeah I did. Thanks.* *17 Jan at 4:40pm* *Report* *Xxxxxx XxxxxxM: Admin you are doing a fantastic job.* *17 Jan at 4:41pm* *Report*

CHAPTER 7: DISCUSSION

This chapter discusses how the anti-cyberhate groups countered the threat to their operations, how these communities evolve from four phases of institutionaization, and how unsustainability of institutionalization process of online communities is a matter of concern.

7.1 Responding to Threats

From the early stage of their life cycle non-binding online communities faced a pressing issue of cyber attack, particularly hatred offenses. These disruptions hampered their operations. There had been concerns over the Admins's inability to counter hatred activities. The non-binding online communities, ephemerally initiated by the creators with the operational support of a group of Admins, and collectively monitored by Netizens, demonstrates that both the Admins and members of the group had a shared goal to address issues of Cyberhate and provide informational help in crisis. Initially the Admins and the members didn't work together and they were unable to control spiking Cyberhate. However, their collective coordination supported by institutional legitimacy and relational coordination dimensions was able to control Cyberhate in their domain.

The emergence of Cyberhate and subsequent emergent coordinated action revealed two facets of the collaborative approach of the non-binding online groups: either a collective approach of different actors - Admins and Members, or, actions of Members only. However, in both situations leadership plays a crucial role. The leadership is both legitimate and institutionally supported, or emergent. The general members did not directly participate in enforcing social control until they were satisfied with Admins' performance. However, they got actively involved when they realized that the Admins were not able to command and control. They actively shared responsibilities with the other members in monitoring, surveilling, helping, reporting and guiding members. Their interaction with other members was proliferated as they were engaged in problem solving communication frequently, timely, and accurately.

The emergent coordinated action indicated the determination of the Admins and members in controlling the rising Cyberhate in their forums. From immediate response, requesting to report, time zone sharing job approach, wall and folder on-off approach, recruiting additional Admins, and advocating and lobbying the Admins and members went through a collective learning process. They worked together to institutionalize the operation and management of the new enforcement mechanisms.

The ACH team efforts became visible as a result of invoking institutional carriers supported by relational coordination dimensions. Although the Enforcer had the ultimate decision power, the other members of the ACH team participated in activities like monitoring, surveilling, helping and guiding. The effective process of ACH team efforts brought in a positive mutually reinforcing relational coordination between communication and relationship dimensions. However, in the absence of or ineffective ACH team efforts, members innovated by forming an advocacy ACH group. This approach is a replication of the parent non-binding online group. In both the cases the new entities acted as an institution with its own operational rules and norms.

However, during their life cycle they faced several internal and external challenges. The internal challenge was management, including lack of enforcers

(Admins), lack of 24/7 monitoring mechanism, lack of operating rules and rules of engagement. The external challenge was offenders working alone or working in groups (e.g. troll command center). These challenges made them endure, adapt and evolve during their life cycle. The Admins and members learn from Cyberhate attacks and innovated new strategies to counter these attacks. They added more Admins, adopted operating rules, sought collaboration, etc. in countering Cyberhate. However "any collaboration requires some form of interaction between participants" (Suthers, 2006, p. 7) and "collaboration requires managing mutual awareness of each other's contributions" (Dwyer and Suthers, 2006, p.495) which Admins and members of the Facebook group exhibited during their interactions. In a short period of time their learning curve rose exponentially and their institutional efforts became detrimental to sustain their anti-Cyberhate efforts. These finding are consistent with Scott (2008) and Gittell (2011); i. e. two of the theoretical lens used in this research.

7.1.1 Adapt to emerging challenges: ability to evolve from a chaotic state to a self-organized group.

Ephemeral online communities are always evolving (Feenberg and Bakardjieva, 2004) and have a short span of life, which faces different emergent challenges faster than formal online communities (Lanzara, 1983). Online communities supported by formal organizations have specific structure (Kaiser, Tuller, and McKowen, 2000) and organized processes (Bell and Kozlowski, 2002). Some of the significant issues of online communities are open membership (Chen, Chen, and Liu, 2008), lack of coordination and control (Zittrain, 2008) and sustainable issues (Thomas and Botha, 2010). The question is how organizations survive. In his seminal book, Barnard (1938, p. 6) wrote: "The survival of an organization depends upon the maintenance of an equilibrium of complex character in a continuously fluctuating environment by readjusting of processes internal to the organization". This statement is also echoed in new literatures in the domain of institutional theory. According to institutionalization theorists, notably, (Meyer and Rowan, 1977; DiMaggio and Powell, 1983; Meyer and Scott, 1983; Zucker, 1983; Scott, 1987, 2003 and 2008) organizations tend to adapt by changing their organizational structure with the changes in their organizational environment. Similarly, empirical evidence suggests non-binding online groups, which are assumed to be a chaotic entity, adapt to changing emergent challenges by adopting several approaches by devoted actors in these communities.

- Photo posting was controlled (halted) when offenders uploaded offensive pictures. Then afterwards they regulated the photo postings in a timely manner.
- When the site was vandalized they halted the process, then adopted new strategies, recruited additional admins, and regulated the posting etc.
- When the membership declined or offensive attack intensified they adapted by transformation and mitosis, respectively.

These findings are similar to Fullan's (2004, p.12) argument that "sustainability requires continuous improvement, adaptation and collective problem solving in the face of complex challenges that keep arising".

7.1.2 Change problem solving approaches when called for.

This case study revealed that rules were created as an intervention instrument. Admins created Standard Operating Procedures (SOPs) and rules of engagement only after the vandalized incident occurred on 19th January. Activities induced generation of rules is an inherent characteristic of physical ephemeral groups (Lanzara, 1983) and also found in non-binding online groups. Till the 19th the privacy setting of the site was "open: all content public", and after the vandalism incident the site's privacy setting was changed to "closed: limited public content". Admins exercised their regulatory authority by not allowing all time postings (to members).

Authority delegation: After the vandal attack they immediately recruited three additional Admins to the group. Facebook enforcement system keeps Admins above the Members. Only Admins can remove hatred postings and offenders. A Member can be delegated for these jobs when he or she is "promoted" to Admins. In this sense, Facebook is characterized by a system of "distributed authority" (Garcia and Steinmueller, 2003) as in Wikipedia. However the case study shows that initial Admins recruited more Admins only after certain procedures have been met. For example they did a background check of the prospective Members who engaged and participated very actively. The selection was based on candidates' interest and active participation. The regular process of their interactions seems to have helped the Admins in their decision making of selecting the right candidates for Admins.

With these institutional structures their shared goal of anti-Cyberhate effort was fully internalized (Lanzara, 1983) as vigilance increased, high flagging occurred and blocking and removing action swelled. These problem-solving actions occurred regularly with or without stimuli (e. g. hatred postings). Thus the ACH team members were able to solve problems (created by Cyberhate attacks) on their site by empirically developing and adopting behaviors that Tolbert and Zucker (1996) define as habitualized action. According to Tolbert and Zucker (1996, p.181) "Habitualization is the development of patterned problem-solving behaviors and the association of such behaviors with particular stimuli". In response to Cyberhate, Admins' creation of anti-cyberhatestructural arrangements and formalization of such arrangements in their policies and procedures were part of their habitualization process.

7.1.3 Collective Enforcement: Enforce rules and norms through increasing monitoring and reporting.

Admins on vigil: The Admins of the EQ1 Group were found to be very vigilant after the vandal (hacking) event. They were collectively monitoring the wall, photo site, and discussion forum 24/7. They posted a code of conduct from time to time and reacted to offensive postings immediately. In this way Admins constrained and regularized members behavior by rule setting, monitoring and sanctioning activities (Scott, 2001, pp. 51-52).

After the creation of SOP, rules and recruitment of additional Admins, the group moved from a loosely coupled non-binding group to a self-governed entity. After their vigilance went up, offenders were blocked/removed, offensive postings were deleted, and response to members' requests and reports were quick. Thus deleting and blocking frequency went up.

During this crisis management process, Admins interacted with each other frequently and are seen collaborating and supporting each other until the ordeal was managed. Even members were seen helping Admins in finding offenders and their postings. As the synergy went up their obedience to duty was visible. They started to emphasize values of the group like the Wikipedians do (Brynt, Forte, and Bruckan, 2005). They started to look for conformity and compliance to the objectives of the group as mentioned in the profile page. They would proudly mention themselves as "Admin on Duty". Unlike in Wikipedia's "consensus" (Morgan, Mason, and Nahon, 2012) they did not compromise on their job and allowed "no freedom of speech" on their forum regarding the hatred messages. The activities were intense during this period. Rules were enforced, expectations were high, values being reminded and Admins and members were working around the clock. Thus a social consensus among the ACH team members concerning the ACH structure developed which Tolbert and Zucker (1996) define as objectification of the institutional process. "Objectification involves the development of some degree of social consensus among organizational decision-makers concerning the value of a structure, and the increasing adoption by organizations on the basis of that consensus" (Tolbert and Zucker, 1996, p. 182).

Monitoring: Two prominent supporting activities for effective collective enforcement are monitoring and reporting in non-binding online groups. Admins frequently posted Updates to inform about the group info, policy, and events. Moreover they posted warnings against deviance behavior on the forum. During the first two weeks of the crisis their update postings were very high. They were posting on hourly basis. When some members did not comply, Admins immediately were seen referring to their updates as a reminder or using it to give warnings. And when defiance went over the ceiling Admins invoked their authority to punish by deleting hatred messages. If repetitions occurred members were removed from the group.

Admins' monitoring of rivals' activities not only help them to control offensive activities on their domain but also help them in objectification of their anti-Cyberhate process. "Objectification of structure is partially a consequence of organization's monitoring of competitors and efforts to enhance relative competitiveness" (Tolbert and Zucker, 1996, p. 182). Admins established normative relationships via the Facebook reporting system which members also have access. They regularly posted updates that worked like briefings to members concerning when they can post and when they can not. Moreover the updates are notices for members to report any disinhibition activities (Suler, 2008). Members can also send messages through Facebook messaging system to help in monitoring.

7.1.4 Sustain - Institutional Persistence: the ephemeral nature of online communities

The case study suggests that initially leaderless movements gained legitimacy through the institutionalization process. "Legitimacy is a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions" Suchman (1995, p574). What does the legitimacy do? According to Scott (2008), it wields a clout on organizational sustainability. Plenty of articles after Barnard's seminal publication in 1938 are available that highlight the importance of leadership in sustaining organizations. Recent research particularly by Fullen (2004), suggest that one of the key drivers for sustainability is leadership. The findings of this case study

also suggest that leadership played a significant role in sustaining or adaptation (of the group).

Restavek: The case study revealed that one particular actor, one of the Admins, defined as Restavek is crucial for survival of non-binding online group. This Admin stayed with the group like a Restavek, which means “one, who stays with” in French language (McCalla, 2002)[20]. Restavek is part of the Haitian culture and one of the findings of the content analysis in this study. In Haiti, poor parents give their children to work as servants to rich families. And these kids are called restavek. These days this word may have a negative connotation in Haitian culture. But in this study it was found that the Admin "Restavek" not only stayed with the dwindling group but also worked hard to promote the group. The Restavek has become instrumental to transform the group into a new identity. The group is now focused to contemporary issues like sports and politics related to Haiti.

Anti-Cyberhate alliance: Members who resisted racial hatred build a close relationship among themselves, forming a relational system. "Relational systems are made up of connections among actors" (Scott, 2003, p. 886). With active advocacy of a group member they formed an anti-hate Facebook group called “Racism is schism on a serious tip”. This forum helped build connections among them.

The home page of this group denounces racial hatred as well as published names of the members who promoted racial hatred in the EQ2 group (Figure 5). They even monitored every posting in their parent group (EQ2) and visited different places on the Facebook groups that promote Cyberhate. They stayed in close contact with Admins and warned them whenever they saw offensive postings. Once they saw the hatred postings, they immediately flagged, warned and reported the hatred postings. Such a control mechanism is like Panopticon control (Bentham, 1962; and Foucault, 1979) to surveillance hate postings and Cyberhaters.

7.2 Four Phases to Institutionalization

In this section four phases of the institutionalization process of non-binding online communities are discussed. Part of this discussion (the pilot study) has already been published in 2012 in HICSS proceedings. At the initial stage the non-binding online communities utilize institutional elements loosely, but call for norms compliance. At this stage self-coordinated policy setting occurs on ad-hoc basis. During the group formation process the members tend to learn from their experiences. The experiential phase is characterized by the group starting to call for rule compliance. Their experiences and observations make them appreciate that institutional elements or interventions are essential to run their operations smoothly. They start to self-report (volunteer basis) regarding any unwanted behaviors. These two phases are more ephemeral than other phases of institutionalization process for non-binding online group. However institutional policies for example rules, SOPs etc are created during these two phases.

In the next phase, non-binding online groups start to consolidate their institutional activities by enforcing policies i.e rules, standard operation procedures,

[20] Reste avec (in French).

etc. (self governed enforcement). Once these policies are formally integrated into the operational functions of the group maturity occurs (institutionalization). The study reveals that this process is not linear but it is an iterative process overlapping consecutive phases (see Figure 11) and has been discussed below. Key conceptual findings of this discussion are summarized in Table 32.

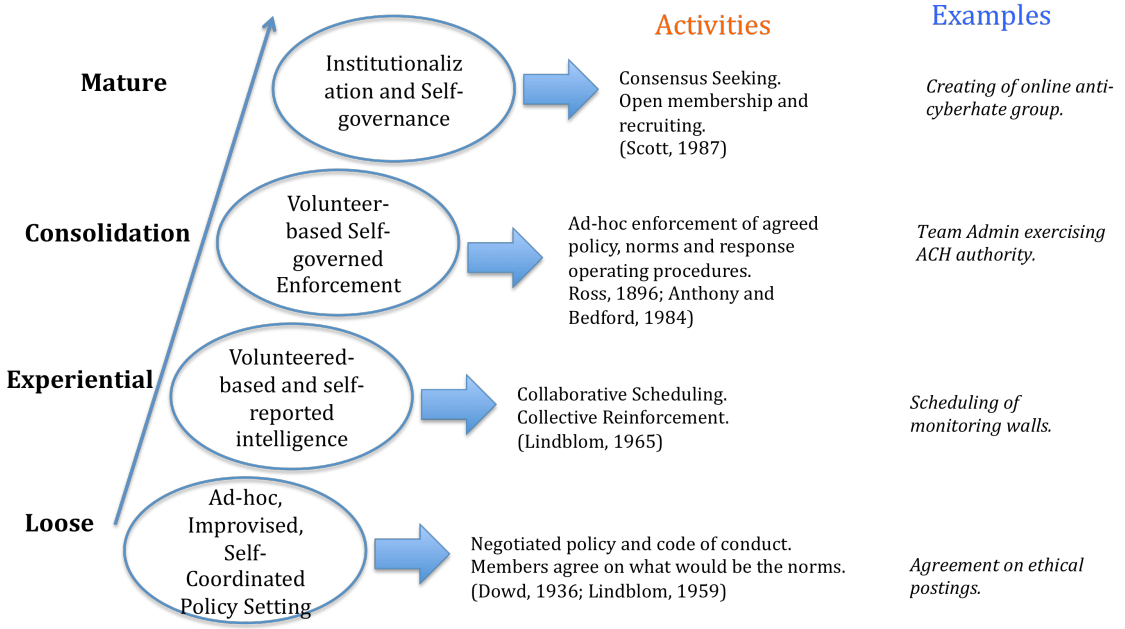

Figure 11: Evolution of Loose Self-coordination to Institutionalized Self-coordinated Governance

7.2.1 Ad-Hoc, improvised, self-coordinated policy setting

When a crisis occurs in an online community, it is likely that some members take action immediately and without organization. Researchers in relational coordination theory (Follett, 1949) conceptualize coordination as a process that occurs through a network of tasks and communications. Gittell (2006) expands this theory in arguing that in a relational coordination, participants share some common goals that allow them to join forces, share knowledge that helps relate and coordinate tasks, and foster mutual respect to overcome barriers. Participants do not need to know or to like each other. It is the role that each assumes that links them and enables them to work together toward their mutual goal.

Negotiated policy and code of conduct. Some Facebook groups' norms and standards are explicitly posted on walls and on the introduction profile of the page, while others are implicitly understood and embedded in members' expressions. Group members are supposed to follow the group norms to which they agreed at the time they joined the group.

Devising a system of discipline to compel Facebook groups to conform to standards (explicit or implicit) is limited to warning postings by monitors or enforcers.

However, even if such initial actions by the monitors are limited, more severe steps can be taken within Facebook groups. This observation of "low initial sanctions" was also noted by Ostrom (1990). From a self-regulation perspective, enforcers with helpers can control by reporting and deleting the hatred postings and by removing members who promote hate in the Facebook group, or even by exposing names of individuals who promote hatred in other Facebook groups by detectives. For example, as mentioned earlier, a counter strategy adopted by the victims of racial hatred was formation of an anti-hate Facebook group "Racism is schism on a serious tip!". The home page of this group denounces racial hatred, and publishes a name list of people who posted racial hatred.

Norms, regulations, folkways, and mores. Rules and regulations are formally created by organizations that control the posting platforms (in this case, Facebook.com). Regulation allows for controlling human or societal behavior using rules or restrictions (Koops, Lips, Prins, and Schellekens, 2006).

Group norms are not laws, but members are expected to comply. Norms are like folkways and mores, which consist of shared understandings about the behavior of each member in a group, where group members may approve, disapprove, tolerate or sanction, within particular contexts (Sumner, 1907). They promote self-regulation by social regulation. This approach aptly suits the Facebook group where enforcers and other members approve, disapprove, tolerate or sanction behaviors in the online forum. Their approach to exercising authority is to induce folkways and mores in a group (Dowd, 1936).

7.2.2 Volunteer-based and self-governed intelligence

Lindblom (1959) describes governance as a science of muddling through in which disjointed democratic forces somehow incrementally end up with a strategy of decision. He further argues that relevant issues and affected interest lead to a partisan mutual adjustment (Braybrooke and Lindblom, 1963; Lindblom, 1965).

Watching activities on Web 2.0 allows government agencies and others (e.g., private watchdogs) to conduct intelligence, which refers to watching over the activities of a subject populace to better serve and protect (Subba and Bui, 2010). Facebook and its members (the detectives and the monitors) put their surveillance antenna on high scanning gear in the Facebook walls and discussion forums for malicious online threats, malicious websites and online scammers for fraudulent online activities. If someone posts fraudulent messages, group members and Admins warn others and also ask the offenders to comply with the norms of the group. In the case of Haiti Facebook groups, the ACH actors and Facebook.com collectively work to minimize Cyberhate on the Facebook pages. It has been noticed that members of the ACH team detected, flagged, warned, reported and deleted the hatred postings as soon as the hatred messages were posted. The case of troll command center, discussed in earlier analysis chapter, is such an example.

7.2.3 Self-governed enforcement

In 1896, Ross argued "the system of control, like the educational system, is charged, not with revising the structure or functions of society, but with the shaping of individuals" (Ross, 1896, p. 521).

One possibility would be to put into place a democratic control system whose objective is to mitigate Cyberhate. Such a system would consist of a mechanism that manages the behavior (Cangussu, Miller, Cai and Mathur, 2009) to accomplish a

specific number of roles in the system (Anthony, 1984). Controlling the publication of Cyberhate postings can be explained using the thermostat concept (Anthony, 1984). Individuals, Admins, surveillance groups, or automated mechanisms like control scripts embedded in the online forums, act as independent and automated components of a thermostat. Admins and control scripts – unlike individual users and surveillance groups – may act as enforcers. The thermostat activates the script to automatically purge hate words. The digital thermostat is an example of inanimate control (Gibbs, 1990), whereas panoptic control (Bentham, 1962; Foucault, 1979) would be creating anti-Cyberhate (ACH) groups on Facebook pages to monitor hate postings and their creators. Autonomous bots on Wikipedia keep the encyclopedia free from vandalism and other damaging edits (Smets, Goethals and Verdonk, 2008).

Exercise of ACH authority. Facebook is designed in such a way that Admins (enforcers) can control postings on the walls and forums. In addition, general Facebook users may also raise alerts against offensive postings.

The ACH enforcement mechanism is based on three approaches: control, counter, and reduction of Cyberhate. The Control approach includes command and control, exercise of authority, regulations/folkways/mores, self-regulations, discipline, and enforcement. Individuals who create the group have authority over the pages. Admins can exercise authority to control hate postings on the Facebook walls and forums.

Enforcement through a self-regulated control system. Members of an Admin group and individual Facebook users work in tandem to address the Cyberhate issue on the Facebook groups studied. The objective is to enforce mitigation policy. Processes of the self-regulated control are also found in the data, and are presented below.

a) A detective detects Cyberhate activities (hatred postings) and feels the need to contain them. Detectives may include individual group members and Admin members.
b) A monitor assesses the Cyberhate activities based on the social norms and identifies the postings as hate. The monitors or even the helpers may report and flag the postings. Monitors may include individual group members and Admin members.
c) An Enforcer addresses the flagged inappropriate postings and chooses to remove them. Enforcers include Admin members and Facebook teams.
d) Enforcers and other members use communication network etiquettes such as walls, discussions forums and mailboxes to inform and educate members who are involved in nefarious activities. This initial approach taken by the ACH actors tends to influence or persuade online discussants to comply to a proper etiquette rather than impose outright penalty.

For example, an ACH group member observes different places on their Facebook groups' pages that promote Cyberhate. Once they see these hate postings, they immediately flag, warn and report them. Such a control mechanism is panoptic control (Bentham, 1962; Foucault, 1979). In this way, empirical evidences suggest members of the ACH group works in tandem as a self-coordinated process of collective reinforcement (Fisher, 1970) in order to mitigate the Cyberhate postings on their walls. The mitigation process may consist of early warnings to block the offenders or remove the postings, then to ban momentarily, and ultimately remove the

offenders from the group. This mechanism is similar to Wikipedia's 3RR policies, three-revert-rule, discussed by (Morgan, Mason, and Nahon, 2012). Moreover offenders who violate the rules are likely to assessed graduated sanctions by the enforcers (Ostrom, 1990).

7.2.4 Institutionalizing anti-cyberhate process from ad-hoc to self-governance

Powell (2007) uses the terms "new institutionalism" to describe supra-individual phenomena. As rules, norms, codes of conducts, and enforcement practices have become routine over space and time Scott (1987), the ad-hoc anti-hate movement slowly seeks to establish legitimacy. Unlike the traditional approach to institutionalization that eventually leads to bureaucracy (Weber, 1957), the necessity here is merely to survive. Selznick (1957) sees organizational structure as a mechanism to meet the characteristics and commitments of participants, and to react to external environmental forces (Selznick, 1957; Scott, 2004).

Countering Cyberhate includes the creation of anti-hate groups and surveillance methodology. Reduction of Cyberhate may be achieved through intergroup contact situations, which helps restructure the social categories into a new common group identity (Gaertner et al., 1993, 1999, & 2008; and Dovidio et al. 2004) among the Facebook users. For example coming together of different individuals (unknown to each other) and forming a new Facebook group gives then a new common identity as anti-Cyberhaters. Subscribed members are seen exchanging messages to lobby for stopping what they view as racism. Interactions bring Facebook members together for their cause i. e., shared goals. Data also reported that Admins as Enforcers exercise their authority whenever a member posts a Cyberhate messages on the Facebook forums.

If information is power (Schumpeter, 1954) then the Admins of such online groups posses enormous influence on controlling hatred emotions in cyberspace. Then, the organization of spontaneous and initially leaderless movements gains legitimacy through the institutionalization process. This view becomes more salient with the rise of Web 2.0 and the concomitant emergence of new convergence behaviors during disasters in the digital age (Subba and Bui, 2010). However, unsustainability of such communities is a challenge for crisis responders who are utilizing Web 2.0 technologies for crisis management.

Table 32: Institutionalization Phases, Life Cycle Phases, Characteristics, Strategies/Activities, ACH Roles and Outcome.

Stages of ACH Institutionalization and Life Cycle Phase	Characteristics	Strategies/Activities and ACH roles	Outcome
Stages of ACH Institutionalization: Ad-hoc, improvised, self-coordinated policy setting **Life Cycle Phase:**	Ephemeral group. Initial leadership begins to self-coordinate for a group	**Strategies/Activities:** Policy is negotiated. Norm compliance is expected.	Form a group immediately and without organization. **LOOSE:** The institutional elements are loosely bound.

Emergence Phase	formation.	**ACH roles:** Guide, Helper	
Stages of ACH Institutionalization: Volunteer-based and self-governed intelligence **Life Cycle Phase:** Growth Phase	Learn from observation and experience Relational roles towards mutual goal Members can conduct intelligence: Self-reported Intelligence	**Strategies/Activities:** Communicate to members regarding rule compliance. Combat strategy: monitoring and reporting. **ACH roles:** Monitor and Detective	Demonstrate need for vigilance through intelligence. Self-regulated control mechanism. **EXPERIENTIAL:** Team members learn from observation and experience about institutional dimensions.
Stages of ACH Institutionalization: Self-governed enforcement **Life Cycle Phase:** Upkeep Phase	Enforcement through exercise of authority or a self-regulated control system. Self-governed Enforcement	**Strategies/Activities:** Exercise of authority. Reporting, deleting, blocking, and removing. **ACH roles:** Enforcer	Rule enforcement. **CONSOLIDATION**: Consolidation of institutional mechanisms takes place.
Stages of ACH Institutionalization: Institutionalizing self-coordination and self-governance **Life Cycle Phase:** Decline and Mitosis Phases	Seeks to establish legitimacy Routine self-governance Retain the membership base Survival necessity Institutionalized self-governance	**Strategies/Activities:** Self-governance through interactions for shared goals Expansion of the cause through offshoot groups **ACH roles:** Enforcer and Guide	ACH activities become self-governed routine. Formation of strong bonding and common identity. **MATURE:** Legitimacy provides maturity in institutional process.

7.3 Unsustainabilty of Institutionalization of Emergent Response Groups

The story of EQ1 or EQ2 adds to the discussion about the role of informal organizations like non-binding social media groups in service provisioning during crisis and to a broader debate on the governance of service delivery. Formal organization is "the planned co-ordination of the activities of a number of people for the achievement of some common, explicit purpose or goal, through division of labor and function, and through a hierarchy of authority and responsibility" (Schein, 1988, p. 15). Formal organizations have unity of command, unity of direction and centralization (Fayol, 1916) and have "intentional structure of roles" (Koontz and Weihrich, 2005, p126). Organizational structures are complex, bureaucratic, and communication is formal in formal organizations (Daft, 2001). On the other hand according to Robbins (2006, p.240) informal groups are "neither formally structured nor organizationally determined". Unlike formal organizations, informal online communities have no institution controls (Berlanga et al., 2009). Ephemeral or informal organizations have self-prescribed roles; rules are implicit and internalized; and they have a short span of life (Lanzara, 1983). My data analysis indicates non-binding online communities have inherent characteristics of spontaneous birth and their life span tends to be ephemeral. Therefore understanding the workings of institutional elements in different phases of their life cycle help contribute to the contemporary debate on the discourse of community efforts of non-binding online communities during crisis response.

Longitudinal data analysis indicates that non-binding online communities like Facebook groups go through several stages. Based on the literature survey and my data observation I adapted five stages i. e., emergence, growth, upkeep, decline and mitosis (transform or reproduce) (Figure 9) which are discussed below.

Emergence phase is the first cycle of the non-binding online groups and as membership grew it moved-up to upkeep stage. However within a short period of time, in this case study after six months, membership declined when members started to leave the group. The studied groups moved to another part of their life cycle termed as “mitosis”. Mitosis in this study is defined as transformation phase or reproduction phase, which may occur during or after upkeep phase or decline phase. Similar to the findings of Iriberri and Leroy (2009) the nature of life cycle of non-binding online communities found to follow an iterative process.

Emergence: The first stage of non-binding online communities is termed as the emergence stage because the group emerged spontaneously with a triggering event. When the earthquake struck Haiti in 2010 Netizens flocked in hundreds to social media including Facebook. At this earlier stage social media users were responding to seek information. Netizens were attracted to these groups as they had lots of interest on the earthquake. They wanted to help but felt that there was not much information available. Realizing the information deficit Netizens became creators and Admins by creating their own groups on Facebook.

Empirical data on EQ1 and EQ2 suggest that during the first 15 days these groups were loosely bound. Even though attraction was on the rise during this period Admins were not prepared in terms of institutional control other than group norms. The initial profile statement of EQ1 on 12th and 13th January only talked about working together (see example below). No membership etiquette rules were mentioned on its information page at this initial stage.

We are Haitians! We are TheWorld!... Something affect Us, Weput our Hands together and workit out TOGETHER... Let's unitourself and Show the World howStrong we can be by HOLDINGHANDS!
L'union fait la Force!

However, on the night of 13th January the profile statement was changed (see example below) and remained same till the site was transformed to emergent issues related to Haiti. These statements clearly define the purpose of the group and what members are supposed to do. However at this stage no explicit rules of engagement were posted.

Please post any information about missing people, the latest news and reliable NGOs in the groups Earthquake Haiti and Montreal pour Haiti. Thank you very much and please share this message with as many people as possible.
L'union fait la Force!

This page has been created as an informational page to allow everyone to share general comments, relevant information, to help find family members in Haiti, and guide everyone in donating only to legitimate relief organizations.

Empirical data indicate that two functional groups (guide and helper) of the ACH team are more active during emergence phase. At this stage in EQ1 the three Admins executed these functional roles. The new members needed guidance and needed to remind (warn) those who may show disinhibition behaviors (Suler, 2004). At this stage institutional element like rules are found to be loosely bound with lack of coordination. However, the ACH members adopt "graduated sanctions" (Ostrom, 1990, p. 94) approach at the later stage.

Growth and Upkeep: During the growth period information dissemination, communication and interaction among members multiplied than the emergence phase. During growth phase participation rules emerged and members started to self-select roles. However this case study revealed that rules were created as an intervention instrument. Admins created Standard Operating Procedures (SOPs) and rules of engagement only after a vandalization incident that occurred on 19th January. Activities-induced generation of rules is an inherent characteristic of physical ephemeral groups (Lanzara, 1983) and is also found in non-binding online groups. Until the 19th the privacy setting of the site was "open: all content public" and after the vandal incident the site's privacy setting was changed to "closed: limited public content". Admins exercised their regulatory authority by not allowing all time postings to members. More Admins were recruited the next day to share the management and operation responsibilities. With these institutional structures rules were fully internalized (Lanzara, 1983) as vigilance increased, high flagging occurred and blocking and removing action swelled. Admins were able to stabilize the group by consolidating their operations moving towards the next phase.

Some researchers pointed out that during consolidation (growth to upkeep phase) more explicit rules emerge Tuckman (1965), Iriberri and Leroy (2009) and Wang and Yu (2012). This study's findings confirm this view. Moreover, findings of this study suggest that activities of non-binding online communities create rules and procedures unlike formal organizations. Lanzara (1983) observed such behaviors

while studying an earthquake in Italy. The ACH team members' institutional perspective grows based on their experience and observation. That means their institutional activities after the intervention is experiential. Most active ACH functional roles were enforcers, detectives, and monitors during growth and upkeep phase. The monitoring and sanctioning activities are executed by members themselves (of the ACH team). According to Ostrom (1990) such activities makes the system robust and self-governing. During the upkeep phase implementation of the enforcement is consolidated among the ACH team members (Viegas et al, 2007).

The above-mentioned activities were started to decline and seen sporadically. At that time the response of the international community to the crisis was heightened and support were sent to Haiti. Members were aware that help is on the way. “It is time for us to be accountable for the past and take a role in the development o the future”, posted one member.

Decline: My data analysis suggests that the membership started to decline slowly from mid of April (Figure 12). According to Jarvenpaa and Knoll (1998) transient membership is one of the reasons why online community dies. Other reason found in this study was hatred messages on the forum. Members categorically mentioned that they are leaving the group because of rampant postings of hatred messages. Netizens stayed with the group for a short period of time and moved on as they started to lose their interest. At this stage, ACH functional group guide again became active to motivate netizens to stay on. The enforcement mechanism at this stage became routine and got formally integrated into the structure and functioning of the ACH system. That means the institutional activities became mature.

Mitosis: I my case study I found that online communities do not die unlike Iriberri and Leroy (2009) and Wang and Yu (2012) have suggested. While institutional process is ephemeral, such emergent response groups allow for spontaneous revival of or renewed interest in a newly found mission. The next stage of life cycle is termed as mitosis because the new groups emerge from the parent group. The netizens of the parent group either transform or create (reproduce) new groups. The role of ACH functional group guide becomes prominent at this stage.

Transformation: With the decline of the interest on the Haiti earthquake issues membership dwindled on these Facebook groups. However one of the prominent Admins (the guide) of the group stayed who helped transform the group to focus on contemporary issues like politics, and sports. The Admin stayed like a *Restavek*, which means “one, who stays with” in French language (McCalla, 2002). *Restavec* is part of the Haitian culture and one of the findings of the content analysis in this study. In Haiti, poor parents give their children to work as servants to rich families. And these kids are called *restavec*. These days this word may have a negative connotation in Haitian culture. But in this study it was found that the Admin "*Restavek*" not only stayed with the dwindling group but also worked hard to promote the group.

Reproduction: Reproduction of other online communities (Facebook groups) happened when some members of a group splintered away (see figure). Members of the non-binding online communities EQ1 and EQ2 created several Facebook groups during their life cycle. Data analysis suggests that reproduction may occur due to several reasons. Members have different interest and try to create special interest

groups. Members are not satisfied with activities in the parent group. For example some of the members of EQ2 collaborated together within the group but were lacking critical mass to influence the decisions. So they created another Facebook group to fill in the activities that they found missing on the parent group. A Facebook group called "Racism is Schism" was created to address issue of rampant hatred on EQ2. The creator of this group was an activist against Cyberhate who created her group when her repeated warnings went unheeded in the parent group. The splinter Admin did not leave the parent group but kept monitoring to note any offenders.

There is a similarity between reproduction and emergence stages. Both stages occur with a triggering event or situation. The group emerged just after earthquake hit Haiti and the spiking hatred triggered the reproduction of an ACH group.

Though my case study shows that non-binding online communities have a five-stage life cycle, the last phase "Mitosis" may not occur for some non-binding VCs. The occurrence of this phase largely depends on the Restaveks or the rebels. They either transform or create similar groups. Rebels are members who create other splinter groups.

Unlike two above-mentioned situations one more situation may occur as seen in the EQ2 group. If members or leaders are inactive the group will die out. This means the group will have only first four phases. They will eventually die out similar to the formal online communities discovered by Iriberri and Leroy (2009) and Wang and Yu (2012).

CHAPTER 8: CONCLUSIONS

Over the last 35 years online communities have evolved from small group of userss to become a global phenomenon. The proliferation of such online communities in recent years has created rich and complex online social interactions. Netizens all over the world congregate in such digital forums to stay connected with friends and family. However such online communities are not limited to what they were initially envisioned for. For example in the wake of Haiti earthquake online groups on Facebook spontaneously mushroomed. On the one hand some Netizens started to provide sympathy and their support; on the other hand some Netizens were busy posting hatred messages. The tug-of-war between these two groups ensued on Facebook groups. In the light of such situation, this dissertation was structured around these research questions:

RQ1: How do members of online communities practice or invoke a variety of institutional carriers –from rules, values, power systems, protocols to schemas and IT artifacts – to influence the online communities against Cyberhate?

Rq1.1: How do members of online communities practice or invoke *regulative institutional carriers* to influence the online communities against Cyberhate?

Rq1.2: How do members of online communities practice or invoke *normative institutional carriers* to influence the online communities against Cyberhate?

Rq1.3: How does members of online communities practice or invoke *cultural-cognitive institutional carriers* to influence the online communities against Cyberhate?

RQ2: How does Relational Coordination mediate the effects of the institutional practices on the online communities against Cyberhate?

8.1 Summary of the Findings

This dissertation found that similar to formal online communities, ephemeral open non-binding online communities also exhibit institutional characteristics. Institutional pillars and carries are considered as legitimate and sanctions mechanisms are accepted by members of these groups. However these non-binding groups tend to differ in their approach to handle undesired behaviors. It was found that group rules and group norms are prominent regulative mechanisms invoked by members of the groups. Members of non-binding online communities invoke a variety of institutional carriers like rules, norms, mission, SOPs, roles, and jobs etc to influence the online communities against Cyberhate. The leaders and active members play crucial roles to enforce these elements. They also highlight the importance of effective leader-member relationships which help Netizens, random (ad-hoc, voluntary) subscribers of social networking groups, who join forces to promulgate or fight against Cyberhate.

The research found that as adversarial external forces intensify, self-coordination among them becomes more effective and the necessity of self-governance gradually leads to institutionalization. However findings suggest that in non-binding online groups effective relational coordination depends on the leadership. The role of leadership becomes crucial during different phases of the life cycle, particularly when interventions are needed during the early phase and mitosis phase. Moreover, in non-binding online groups the boundaries of role separation are blurred. Barring a few roles, any member of the non-binding online groups can play most of the roles.

8.2 Research Contributions

According to (Henry, 2012), people attempt to create a social order in which some behaviors are acceptable and some are not through the formulation of rules that prohibit unacceptable behaviors and treat them with sanctions.

Empirical evidences suggest many factors affect an ACH group's ability to institutionalize their efforts in a online community. The four main "key factors" for ACH institutionalization process found by this study in EQ1 and EQ2 are: (a) policies; (b) strategies; (c) leadership; and (d) values. They can provide a structure for sustainable non-binding online groups for crisis response. Table 33 presents these essential elements and characteristics.

Table 33: The Four "Key Factors" for Institutionalization of Anti-cyberhate Coordination

Essential elements	Sub-categories relevant to ACH process	Success factors
Policies	SOPs, Rules, purposes	support, guide and reinforce
Strategies (Organization for Anti-Cyberhate)	Role, Jobs, Advocacy, Collaboration, Coordination, Counter, Offshoot group creation, Monitoring, Reporting, Warning	roles, responsibilities, activities
Leadership	Admins (Enforcer), Other key member (Restavek)	take charge, enforce, supervision, motivate
Values	Values, Expectations	respect, compliance, sharing

Each key factor is important unto itself, but it is the combination of these that facilitates and ensures institutionalization of ACH process. Policies including standard operating procedures (SOPs), rules of engagement, purpose of the group support (mission statement), guide and reinforce institutionalization of ACH process. The case of EQ1 clearly demonstrates that for successful institutionalization, policies should be implemented and enforced.

Leadership is critical to the institutionalization of ACH process. The case study of EQ2 clearly demonstrated that leadership failed the whole purpose of the group. Leadership should take charge, supervise and motivate. In the case of social networking structure the leadership (Admin) is by default an enforcer without which institutionalization of ACH process is not feasible.

Strategies are needed for organization for ACH. Strategies are basically activities that carried out based on roles and responsibilities. Members of a social networking site converge from many sectors of a society. However when they

converge most of them have shared goals, for example, to serve earthquake victims. The essential elements of group values are respect, compliance and sharing.

8.3 Limitations of Study

Limitations are an inherent part of any research study. Kozinets (2010) suggests disclosing researchers' presence, affiliations and intensions to the online community members. His suggestion is plausible for closed online communities where members are invited or managed by some institutions. However, my research sites are open and self-emerging social networks where members are loosely coupled with no significant attachment. Here, I followed a non-participative ethnographic approach where the researcher was an invisible non-participant, unstructured observational researcher. As these communities are like "online commons" with huge numbers of members, I avoided contacting community members for their permission. However, I used the utmost privacy and will not disclose any private information of the members. All the quoted postings are devoid of personal information including profiles (name, gender, nationality etc).

In addition, there are some limitations that may have direct effects on various facets of case study methodology, including data collection, data analysis and interpretation. Being a researcher, I am aware that my personal biases may have affected the outcome of the case study. Case study researchers suggest to be aware of such issues beforehand (Becker, 1958). Yin (2003) suggests that to carry out and report to peers a preliminary finding at the data collection phase. Based on this theory a pilot study was carried out and presented to peers and mentors for their feedbacks.

The external validity is another limitation of my study. However, Yin (2003) argues that using theory in a single-case study in research design is a good tactic to counter this limitation. "In analytical generalization, the investigator is striving to generalize a particular set of results to some broader theory" (Yin, 2003, p. 37). In this case crisis situations not only brought help and support, but also created environments for fostering hatred due to emergence of new ICT technologies like social media (including social networking sites). The outcome of a case study may have limited breadth of applicability, but the results of the case study can be generalized to similar cases during which people use social media to provide help and support. However it is to be noted that the conclusions are derived from a specific setting and transfer to other settings may not be possible in its entirety. However the scope of generalizability may include online emergent self-organizing community.

8.4 Future Research

Perhaps a major contribution of this discussion is its explanation of how anti-Cyberhate (ACH) practices take form in a social network – emerging from loose self-coordination to coordinated self-governance. This study also helps raise an important research issue of how, and under what conditions, Netizens decide to get involved without formally elected leaders or defined rules of engagement in a seemingly democratic forum.

Another issue that deserves future research is precisely how "Admins" who bestow rights in managing information on their sites, establish etiquettes and regulate the forums. This would be, it is presumed, with the goal of getting their message out most effectively. As in any control effort, it is important to measure the effectiveness of the anti-Cyberhate (ACH) effort. Many ACH postings appear to be sensible with constructive propositions, while many others seem to be merely complaints. Both types of postings lead to an inordinate amount of members' time in online debates,

and in Admin time managing them. This can lead to lack of efficiency and effective promulgation of the group's message. Moreover, Admins have sole authorities. There should be mechanism to allow members to access to Admin level democratically – through voting processes.

Institutional carriers do contribute to build the legitimacy of a patterned behavior. Future research may try to understand which carrier is stronger in relation to others.

One of the biggest challenges of non-binding ephemeral online communities is its sustainability. A future study is needed to understand how essential institutional elements help sustain such organizations. Another possible future research interest could be transformation or spinoff of groups.

Gittell (2000) found that information technology undermines relational coordination in highly uncertain, interdependent and time constrained service operations. However, with the pervasive and entrenched of Web 2.0 applications in our societies a future research on relational coordination and social media is highly relevant.

8.5 Concluding Remarks

Core intuitionalists argue that institutional framework helps actors engage in long-term plans. My research argues institutionalization in non-binding online communities is needed even in short term as a means to ensure social order. Data exhibit evidences of "institutional stickiness" thanks to relational coordination. Institutional persistence limited by short-time horizon; Once spontaneous event-driven vested interest fades.

Social networking sites such as Facebook are not only used to make friends, but can also be used to help coordinate humanitarian assistance and rescue operations during time of disasters. Such online emergent response groups can have a more substantive and grander impact on society when used altruistically for the greater good. The research findings indicate the emergence of self-organized, self-coordinated effort by netizens and non-governmental groups to respond to crisis in online communities. However, the challenge is not only to institutionalize such activities but to sustain if unless appropriate. Policy makers need to realize the significance of some key factors including leadership, policy, strategies and values in a global society enabled by Web 2.0.

References

Aldrich, H.E. (1999). *Organizations Evolving.* Thousand Oaks, CA: Sage.

Alexander, D. E. (1993). *Natural disasters.* Dordrecht, The Netherlands: Kluwer Academic.

Andrews, D. C. (2001). Audience specific online-community design. *Communications of the ACM*, 45(4), pp. 64-68.

Anthony, R. N., Dearden, J., & Bedford, N. (1984). *Management Control Systems.* Homewood: Irwin.

Anti-Defamation League. (2001). *The Consequences of Right-wing Extremism on the Internet.* Last accessed on March 24, 2012 at http://www.adl.org/extremism_rw/default.asp

Anti-Defamation League. (2010). *Report of the ADL on Responding to Cyberhate: Toolkit for action.*Last accessed on March 24, 2012at http://www.adl.org/internet/Binder_final.pdf

Archick, K. (2004), Cybercrime: The Council of Europe Convention (CRS report for congress order code RS21208). Last accessed on March 24, 2012 at http://fpc.state.gov/documents/organization/36076.pdf.

Arthurs, H.W., & Kreklewich, R. (1996). Law, legal institutions, and the legal profession in the new economy. *Osgoode Hall Law Journal, 34*(1)*,* 1-60.

Baldassarri, D., & Grossman, G. (2011). Centralized sanctioning and legitimate authority promote cooperation in humansProc. Natl. Acad. Sci. USA 108, pp.11023–11 027. Last accessed on January 3, 2014 at www.pnas.org/cgi/doi/10.1073/pnas.1105456108

Bailey, J. (2006). Strategic alliances: The Inter-related roles of citizens, industry and government in combating Internet Hate. *Canadian Issues*, spring, 56-59.

Ballard, J. D., Hornik, J. G., & McKenzie, D. (2002). Technological facilitation of terrorism. Definition, legal, and policy issues.*American Behavioral Scientists, 45*(6), 989-1016. doi: 10.1177/0002764202045006005

Barley, S. R. (1986). Technology as an occasion for structuring: evidence from observations of CT scanners and the social order of radiology departments, *Administrative Science Quarterly*, 31, 78-108.

Barley, S. R. and Tolbert, P. S. (1997). Institutionalization and Structuration: Studying the links between action and institution. *Organization Studies*, 18(1), pp.93-118.

Barnard, C., (1938). Functions of the Executive. Cambridge, MA: Harvard University Press.

Becker, H. S. (1958). Problem of inference and proof in participant observation, *American Sociological Review*, 23(6), 652-660.

Bell, B.S., & Kozlowski, S. W. J. (2002). A typology of online teams: Implications for effective leadership. *Group Organization Management*, 27 (14).

Belluck, P. (1999, July 7). Hate groups seeking broader reach. *The New York Times.*Last accessed on March 24, 2012at http://select.nytimes.com/gst/abstract.html?res=F2061FF934590C748CDDAE0894D1494D81

Bentham, J. (1962) The Works of Jeremy Bentham, published under the Superintendence of his Executor, John Bowring, Edinburgh (William Tait, 1838-

1843), 11 vols. Vol. 4., Chapter: LETTER I.: IDEA OF THE INSPECTION PRINCIPLE. Last retrieved on January 2014 from http://oll.libertyfund.org/title/1925/116374.

Berg, T. (2001). Confronting evil on the Internet. *America,* 184(20). Last accessed on March 24, 2012at http://www.americamagazine.org/content/article.cfm?article_id=1512

Berger, P.,& T. Luckmann. (1966).*The Social construction of reality, A Treatise in the sociology of knowledge,* Garden City, New York: Doubleday and Company.

Berlanga, A., Rusman, E., Bitter-Rijpkema, M. & Sloep, P. (2009). Guidelines to foster interaction in online communities. In R. Koper (Ed.) Learning Network Services For Professional Development. Berlin: Springer Verlag. pp. 27-42.

Bjorck, F. (2004). Institutional theory: A new perspective for research into IS/IT security in organization. *Proceedings of the 37th Hawaii International Conference on System Sciences*.

Bocij, P.,& McFarlane, L. (2003). Cyberstalking: The technology of hate. *The Police Journal*, *76*(3)*,* 204-221.

boyd, d. (2006). Identity production in a networked culture: Why youth heart MySpace. *American Association for the Advancement of Science*. St. Louis, MO. February 19. Last accessed on March 27, 2012 at http://www.danah.org/papers/AAAS2006.html

boyd, d., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1).

Boyatzis, R. E. (1998). *Transforming qualitative information*. Thousand Oaks, California:Sage.

Braybrooke, D. and Lindblom, C.E. (1963). A strategy of decision. Policy evaluation as a social process. New York:Free Press.

Bryant, S. L., Forte, A., Bruckman, A. and Pendergast, M. (2005). Becoming Wikipedian: transformation of participation in a collaborative online encyclopedia. *Proceedings of the 2005 international ACM SIGGROUP conference.*

Cangussu, J. W., Miller, S. D., Cai, K. Y., & Mathur, A. P. (2009). Software cybernetics, *Encyclopedia of Computer Science and Engineering*, 4, 2575-2583, New Jersey: John Wiley & Sons.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis.* Thousand Oaks, CA: Sage.

Chen H., Cheng X., Liu Y., (2008). Finding core members in online communities. Poster paper at WWW 2008, April 21–25, 2008, Beijing, China. ACM 978-1-60558-085-2/08/04. Last accessed on March 24, 2012 at http://wwwconference.org/www2008/papers/pdf/p1233-chenA.pdf

Craig-Henderson, K., (2006). Hate on the Net: Bigotry + computer technology = cyber hate, *International Journal of Knowledge, Culture and Change Management, 6*(4), 29-35.

Creswell, J. W., and Clark, V. L. P. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage.

Daft, R. L. (2001). Organizational theory and design. Ohio: South-Western Thompson learning.

Deephouse, D.L. (1996). Does isomorphism legitimate? *Academy of Management Journal*, 39(4), 1024-1039.

Denzin, N. K. (1978). *The research act: A theoretical introduction to sociological methods.* New York: Praeger.

de Souzaa, C. S., Nicolaci-da-Costab, A. M., da Silvac, E. J., Pratesd, R. O. (2004). Compulsory institutionalization: investigating the paradox of computer-supported informal social processes. *Interacting with Computers*, 16, 635–656.
de Soysa, I. and Jütting, J. (2007). Informal institutions and development: Think local, act global? OECD. Last accessed on January, 2014 at http://www.oecd.org/dac/governance-development/37790393.pdf
Dibbell, J. (1993). A rape in cyberspace: How an evil clown, a Haitian trickster spirit, two wizards, and a cast of dozens turned a database into a society. First published in *the Village Voice*, December 23. Last accessed on March 24, 2012 at http://www.juliandibbell.com/texts/bungle_vv.html
DiMaggio, P.J. (1988), Interest and agency in institutional theory, In L.G. Zucker (Ed.), *Institutional patterns and organizations: Culture and environment* (pp. 3-22). Cambridge, MA: Ballinger.
DiMaggio, P.,& Powell, W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*. 48(2), 147-160.
Douglas, K. M., Mcgarty, C., Bliuc A., & Lala, G. (2005). Understanding Cyberhate: Social competition and social creativity in online white supremacist groups, *Social Science Computer Review*, *23*(1), 68-76. doi: 10.1177/0894439304271538
Dowd, J. (1936). *Control in human societies.* New York: D. Appleton-Century Company.
Drabek, T. E. (1968). Disaster in aisle 13: A case study of the coliseum explosion at the *Indiana State fair-grounds, October 31, 1963,* Disaster Research Center Monograph Series No. 1. Columbus: College of Administrative Sciences, The Ohio State University.
Drabek, T. E., and McEntire, D. A. (2002). Emergent phenomena and multiorganizational coordination in disasters: lessons from the research literature. *International journal of mass emergencies and disasters*., 20 (2), pp. 197-224.
Dwyer, N. and Suthers, D. D. (2006). Consistent practices in artifact-mediated collaboration. *Computer-Supported Collaborative Learning*, 1, pp.481–511. DOI 10.1007/s11412-006-9001-1
Dynes, R. R., Quarantelli, E. L., & Kreps, G. A. (1981). *A perspective on disaster planning (*Disaster Research Center, University of Delaware, Report Series 11). Last accessed on March 24, 2012 at http://dspace.udel.edu:8080/dspace/handle/19716/1259
Eisenhardt, K.M. (1989). Building theories from case study research. *Academy of Management Review*, *14*(4), 532-550.
Espinosa, J. A., Nan, N., and Carmel, E. (2007). Do gradations of time zone separation make a difference in performance? A first laboratory study. *Proceedings of International Conference on Global Software Engineering. ICGSE 2007. Second IEEE International Conference on (pp.12-22). doi: 10.1109/ICGSE.2007.20* (pp12-22).
Espinosa, J. A., Slaughter, S. A., Kraut, R. E., and Herbsleb, J. D. (2007). Team knowledge and coordination in geographically distributed software development. *Journal of Management Information Systems*, 24 (1), pp. 135-169.
Fayol, H. (1916, 1949). General and industrial management (C. Storrs, Trans.). London: Pitman. (Original work published 1916).
Feenburg, A., and Bakardjieva, M. (2004). Virtual community: No 'killer implication.' *New Media and Society*, *6*(1), 37–43.

Fernandez, R. M. & Gould, R. M. (1994). A Dilemma of State Power: Brokerage and Influence in the National Health Policy Domain, *American Journal of Sociology*, *99*(6), 1455-1491.

Fernback, J., & Thompson, B. (1995). Virtual communities: Abort, retry, failure? Last accessed on March 24, 2012 at http://www.well.com/~hlr/texts/VCcivil.html

Fisher, K. E., Unruh K. T., & Durrance, J. C. (2003). Information communities: Characteristics gleaned from studies of three online networks. In R. J. Todd (Ed.), *Proceedings of the 66th Annual Meeting of the American Society for Information Science and Technology* (pp. 299-305). Last accessed on March 24, 2012 at http://ibec.ischool.washington.edu/static/pubs/asist2003.pdf

Follett, M. P. (1940), Individualism in a planned society. In H. C. Metcalf and L. Urwick (Eds.), *Dynamic Administration: The Collected Papers of Mary Parker Follett* (pp. 295-314).New York, NY: Harper and Brothers Publishers.

Foster, A. (2004). A nonlinear model of information-seeking behavior. *Journal of the American Society for Information Science & Technology*, 55(3), 228-237.

Foucault, M (1979). Discipline and punish: The birth of the prison. New York: Vintage Books.

Fox, N.,& Roberts, C. (1999). GPs in Cyberspace: The Sociology of a online community, *The Sociological Review*, 47(4), 643-71.

Friese, S. (2011), Using ATLAS.ti for analyzing the financial crisis data, *Forum: Qualitative social research,* 12(1).

Fritz, C. E., & Mathewson, J. H. (1957). *Convergence Behavior in disasters: A problem in social control* (Disaster Study No. 9, Publication No. 476). Washington, DC: Committee on Disaster Studies, National Academy of Sciences, National Research Council.

Fullan, M. (2004). System Thinkers in Action, moving beyond the standards plateau. London, the Innovation Unit and NCSL. Last accessed on January 2014 at www.standards.dfes.gov.uk/innovation-unit

Gaertner, S. L., J. F. Dovidio, P. A. Anastasio, B. A. Bachman, and M. C. Rust, (1993). The common ingroup identity model: Recategorization and the reduction of intergroup bias. In W. Stroebe & M. Hewstone (Eds.), European review of social psychology, 4, pp. 1-26.

Gaertner, S. L., J. F. Dovidio, M. C. Rust, J. A. Nier, B. S. Banker, C. M. Ward, G. R. Mottola, and M. Houlette, (1999). Reducing intergroup bias: Elements of intergroup cooperation*, Journal of Personality and Social Psychology*, 76(3), pp. 388-402.

Garcia, J. M., and Steinmueller, W. (2003). The Open source way of working: A New paradigm for the division of labour in software development?. Brighton: SPRU (Science and Technology Policy Research). WP#1.

Dovidio, J. F., Gaertner, S. L., Stewart, T. L., Esses, V. M., ten Vergert, M., & Hodson, G., (2004). From intervention to outcome: Processes in the reduction of bias. In W. G. Stephan & W.P. Vogt (Eds.), Education programs for improving intergroup relations: Theory, research, and practice. Multicultural education series (pp. 243-265), New York: Teachers College Press.

Gade, C. B.N. (2011). The Historical Development of the Written Discourses on Ubuntu, *South African Journal of Philosophy,* 30(3), pp. 303–329

Gaertner, S. L., J. F. Dovidion, R. Guerra, M. Rebelo, M. B. Monteiro, B. M. Riek, and M. A. Houlette, The common in-group identity model, application to children and adults. In Sheri R. Levy and Melanie Killen (Eds.), Intergroup attitudes and relations in childhood through adulthood, Oxford, New York, 2008, pp. 204-219.

Gibbs, J. P. (1990). Control as sociology's central notion. *The Social Science Journal,* 27(1), pp.1-27.
Gibbs, G. R., Friese, S., and Mangabeira, W. C. (2002). The use of new technology in qualitative research. Introduction to Issue 3(2) of FQS. *Forum: Qualitatitve Social Research*, 3(2). Last accessed at http://nbn-resolving.de/urn:nbn:de:0114-fqs020287 on 08/18/14.
Giddens, A. (1984). *The constitution of society.*Cambridge: Cambridge Univ. Press.
Gillham, B. (2000). *Case study research methods.* New York, NY: Continuum.
Gittell, J. H., (2000). Organizing work to support relational co-ordination. *The International Journal of Human Resource Management.* 11(3), pp. 517-593.
Gittell, J.H. (2002). Coordinating mechanisms in care provider groups: Relational coordination as a mediator and input uncertainty as a moderator of performance effects. *Management Science*, 48, pp. 1408-1426.
Gittell, J.H. (2006). Relational coordination: coordinating work through relationships ofshared goals, shared knowledge and mutual respect.In O. Kyriakidou and M.Ozbilgin (Eds), *Relational Perspectives in Organizational Studies: A Research Companion,*Cheltenham: Edward Elgar Publishers.
Gittell, J.H. (2009). High performance healthcare: Using the power of relationships to achieve quality, efficiency and resilience. New York: McGraw-Hill.
Gittell, J. H. (2010). New directions for relational coordination theory. In Kim S. Cameron, and Gretchen M. Spreitzer (Eds.), Submitted to *The Oxford Handbook of Positive Organizational Scholarship (*pp. 400-411). Last accessed on March 24, 2012 at http://centerforpos.org/conference2011/wp-content/uploads/2011/02/POS-Hbk-Ch-30-Relational-Coordination-Gittell.pdf
Gittell, J. H. (2011). Relational coordination: Guidelines for theory, measurement and analysis. Last accessed on March 24, 2012 at http://www.relationalcoordination.org/downloads/Relational_Coordination_Guidelines_8-25-11.pdf
Golder, S. (2003). A typology of social roles in Usenet. A thesis submitted to the Department of Linguistics. Harvard University. Last accessed on March 24, 2012 at http://web.media.mit.edu/~golder/projects/roles/golder_thesis.htm
Goldschmid, R. (2000). *Promoting equality in the information age – dealing with Internet hate.* Last accessed on March 24, 2012 at http://www.cjc.ca/wp-content/uploads/2009/11/Promoting-Equality-in-the-Information-Age.pdf
Gould, R. V. (1989). Power and social structure in community elites. *Social Forces*, 68, 531-52.
Gould, R. V., & Fernandez, R. M., (1989). Structures of mediation: A formal approach to brokerage in transaction networks. *Sociological Methodology* (19), 89-126.
Gross, R. & Acquisti, A. (2005). Information revelation and privacy in online social networks (the Facebook case), *Proceedings of the 2005 ACM workshop on privacy in the electronic society*, WEPS-2005, 71-80. doi: 10.1145/1102199.1102214
Hagel, H., & Armstrong, A. (1997). *Net gain: Expanding markets through online communities.* Boston, MA:Harvard Business School Press.
Harding, R., (2008), Normative Methodology. In J. Box-Steffensmeier, H. Brady, and D. Collier (Eds.), *The Oxford Handbook of Political Methodology*, Oxford: Oxford University Press.
Hercheui, M.D. (2009). Decision making in online communities: how conflictive institutions may influence the formation of parallel governance structures.

Proceedings of the 15th Americas Conference of Information Systems, San Francisco, California, August 6-9.
Hercheui, M.D. (2011). A literature review of online communities: the relevance of understanding the influence of institutions on online collectives. *Information, Communication and Society*, 14(1), 1-23.
Hercheui, M.D. (2011). The Institutionalization of Virtual Communities: How Institutional Carriers Influence Online Governance Structures. *Proceedings of the 19th European Conference on Information Systems* (ECIS 2011), Helsinki, Finland, June, 9-11.
Hiltz, S. R. and Turoff, M. (1978). *The Network Nation*. Reading, MA: Addison-Wesley.
Hine, C., (1994). Virtual community. Last accessed on March 24, 2012 at http://www.cirst.uqam.ca/pcst3/PDF/Communications/HINE.PDF
Hine, C. (2000). *Virtual ethnography*. Thousand Oaks, California: Sage.
Hoffman, A. J. (1997). *From Heresy to Dogma: An Institutional History of Corporate Environmentalism.* San Francisco: New Lexington Press.
Hoffman, E. (2009). Social media and learning environments: Shifting perspectives on the locus of control. *Education (formerly Policy and Practice in Education),* 15(2). Last accessed on March 24, 2012 at http://ineducation.ca/article/social-media-and-learning-environments-shifting-perspectives-locus-control
Horrigan, J. B. (2001). *Online communities: Networks that nurture long-distance relationships and local ties. Pew Internet and American Life Project*. Last accessed on March 24, 2012 at http://www.pewinternet.org/~/media//Files/Reports/2001/PIP_Communities_Report.pdf.pdf
Hughes A. L., Palen, L., Sutton, J., Liu S. B., and Vieweg S., (2008). "Site-Seeing" in disaster: An examination of online social convergence. In F. Fiedrich & B. Van de Walle (Eds.), *Proceedings of the 5th International ISCRAM Conference*, ISCRAM2008, Washington, DC.
Hwang, S., (2008). Utilizing qualitative data analysis software: A review of Atlas.ti, *Social Science Computer Review*, 26.
Iriberri, A. and Leroy, G. (2009). A life-cycle perspective on online community success. *ACM Computer Surveys*, 41 (2), Article 11 (February), 11:1-11:29.
Jarvenpaa, S. L. and Knoll, K. (1998). Is anybody out there? Antecedents of trust in global online teams. J. Managemen. Inform. Syst. 14, 29–65.
Jepperson, R. L. (1991). Institutions, institutional effects, and institutionalism. In W. W. Powell and P. J. DiMaggio (Eds.) *The New institutionalism in organizational analysis* (pp. 143-163). Chicago: University of Chicago Press.
Johansson, C., Dittrich, Y., and Juustila, A. (1999). Software engineering across boundaries: Student project in distributed collaboration,*IEEE Transactions on Professional Communication*, 42 (4), 286-296.
Joinson, A. (1998). Causes and implications of disinhibited behavior on the Internet. In Jayne Gackenbach (Ed.), *Psychology and the Internet: Intrapersonal, interpersonal, and transpersonal implications* (pp. 43-58). California: Academic Press.
Joseph, S., Lid, V., & Suthers, D. (2007). Transcendent Communities. In C. Chinn, G. Erkens and S. Puntambekar (Eds.), *The Computer Supported Collaborative Learning (CSCL) Conference 2007* (pp. 317-319). New Brunswick: International Society of the Learning Sciences.
Kaiser, P., Tullar, W., & McKowen, D. (2000). Student team projects by Internet,

Business Communication Quarterly, 63(4), 75-82.
Kendra, J. & Wachtendorf, T. (2003). Reconsidering convergence and converger legitimacy in response to the World Trade Center disaster. In L. Clarke (Ed.), *Research in social problems and public policy, Terrorism and disaster: New threats, new Ideas, Volume 11-* (pp. 97-122). doi: 10.1016/S0196-1152(03)11007-1
Kim, A. J., (2000). Community building on the Web: Secret strategies for successful online communities. Berkeley, CA: Peachpit Press.
Kling, R. & Courtright, C. (2003). Group behavior and learning in electronic forums: A sociotechnical approach. *The Information Society*, 19, pp.221–235.
Koontz, H. R. & Weihrich, H. (2005). Essential of Management, an international perspectivce. New Delhi: Tata Mcgraw-Hill.
Koops, B., Lips, M., Prins, C. & Schellekens, M.(2006). Starting points for ICT regulations: Deconstructing prevalent policy one-liners,*Information technology and law.*(9). The Hague: T.M.C. Asser Press.
Kozinets, R. V. (2010). *Netnography. Doing ethnographic research online*. Thousand Oaks, CA: Sage Publications.
Kozinets, Robert V. (2002), "The Field Behind the Screen: Using Netnography for Marketing Research in Online Communities," *Journal of Marketing Research*, 39 (Feb), 61-72.
Kozinets, RV. (1999). E-Tribalized Marketing? The strategic implications of online communities of consumption.*European Management Journal,* 17 (3), 252-264.
Kraut, R. E and Resnick, P. with Kiesler et al. (2012). *Building successful online communities: Evidence-based social design*, Cambridge, MA: MIT Press.
Kunda, G. (1992). *Engineering culture: Control and commitment in a high-tech corporation.* Philadelphia: Temple University Press.
Lanzara, G. F. (1983), Ephemeral organizations in extreme environments: Emergence, strategy, extinction (I). *Journal of Management Studies*, 20, 71–95. doi: 10.1111/j.1467-6486.1983.tb00199.x
Lee, E. & Leets, L. (2002). Persuasive storytelling by hate groups online. American *Behavioral Scientists, 45(*6), 927-957. doi: 10.1177/0002764202045006003
Lee, F., Vogel, D. and Limayem, M. (2003). Virtual community informatics: A review and research agenda. *The Journal of Information Technology Theory and Application*, 5(1), 47-61.
Lessig, L. (1999). *Code and other laws of Cyberspace*. New York: Basic Books.
Levin, B. (2002). Cyberhate: A legal and historical analysis of extremists' use of computer networks in America, *American Behavioral Scientist, 45*(6), 958-986.
Licklider, J.C.R. and Taylor, R.W. (1968). The computer as a communication device, *Science and Technology*, 76, 21-31, April.
Lieberman, M. B. and Montgomery, D. B. (1988). First-Mover advantages. *Strategic Management Journal*, 9(summer), pp.41-58.
Lindblom, C.E., (1977), Still Muddling, Not Yet Through, *Public Administration Review*, 39, 517-526.
Lowe, W. (n.d.). Software for Content Analysis: A Review. Last accessed on March 24, 2012 at http://www.ou.edu/cls/online/lstd5913/pdf/rev.pdf
MacLeod, D. and Clarke, N. (2009). Engaging for success: enhancing performance through employee engagement: a report to government. BIS, London. Last accessed on 14 February 2014 at http://www.berr.gov.uk/files/file52215.pdf .
Majchrzak, A., Jarvenpaa, S. L. and Hollingshead, A. B. (2007). Coordinating

expertise among emergent groups responding to disasters. Organization Science, 18(1), pp. 147–161.
Malhotra, A. Gosain S., and Hars, A., (1997). Evolution of a online community: Understanding design issues through a longitudinal study. *In Proceedings of the Eighteenth International Conference on Information Systems*.
Malone, T. W. (1988). What is Coordination Theory? Paper submitted at the NFS Coordination Theory Workshop, MIT, February, SSM WP#2051-88.
Malone, T. W. and Crowston, K., (1990). What is Coordination Theory and How can it help design cooperative work systems, *Proceedings of the Conference on Computer Supported Cooperative Work.*
Mann, D & Sutton, M (1998). Netcrime: More change in the organization of thieving, *The British Journal of Criminology*, *38(2)*, 201-229. Last accessed on March 24, 2012at http://bjc.oxfordjournals.org/content/38/2/201.full.pdf
March, J. G. & Simon, H.A. (1958). *Organizations*, New York: Wiley.
Matzat, U. (2004). The social embeddedness of academic online groups in offline networks as a norm generating structure: An empirical test of the coleman model on norm emergence. *Computational & Mathematical Organization Theory,* 10, 205–226.
Mauss, A. L., (1975). *Social problems and social movements*. New York: J. B. Lippincott
Maxwell, J. A. (2005). *Qualitative research design: An interactive approach*. Thousand Oaks, CA: Sage.
McCalla, J. (2002). Restavek no more: Eliminating child slavery in Haiti. National Coalition for Haitian Rights. Last accessed on January 2014 at http://jmcstrategies.com/wp-content/uploads/2008/08/rnm20021.pdf
Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass Publishers.
Meyer, J. W., & Brian R., (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83 (2), 340-363.
Meyer, J.W., & Scott, W.R. 1983. *Organizational environments: Ritual and rationality*. Beverly Hills: Sage.
Miles, M. B. & Huberman, A. M. (1994), *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks, CA: Sage.
Miller V. V., and Loess, K. (2002). An Institutional analysis of the US foreign sales corporation.*International Business Review*, 11, 753-763.
Morgan, J. T., Mason, R. M., and Nahon, K. (2012). Negotiating cultural values in social media: A case study from Wikipedia. In *Proceedings of the 45th Hawaii International Conference on System Sciences*.
Mulgan, G. (1991). *Communication and control. Networks and the new economics of communication.* New York: Guilford
Murphy, B. C. (2001). Anti-gay/lesbian violence in the United States. In D. J. Christie, R. V. Wagner, & D. A. Winter (Eds.), *Peace, Conflict, and Violence: Peace Psychology for the 21st Century (pp. 28-38).* New Jersey: Prentice-Hall.
Murthy, D. (2008). Digital Ethnography: An Examination of the Use of New Technologies for Social Research, *Sociology*, 42(5), 837-855.
North, D. C. (1991). Institutions. *The Journal of Economic Perspectives*, 5(1), pp. 97-112.
OSCE/ODIHR & Wessler, S. (2009), Preventing and responding to hate crimes, a resource guide for NGOs in the OSCE region, OSCE/ODIHR.
Ostrom, E. (1990). Governing the Commons: The Evolution of Institutions for

Collective Action. New York : Cambridge University Press.
Ostrom, E. (2000). Collective action and the evolution of social norms. *The Journal of Economic Perspectives*, 14(3), pp. 137-158.
Owyang, J. (2008). Online community best practices. Technical report, Forrester Research, Last accessed on 05/14/2014 at http://www.web-strategist.com/blog/2008/02/14/forrester-report-online-community-best-practices/.
Palen, L., Hiltz, S. R., & Liu, S. (2007). Citizen participation in emergency preparedness and response. *Communications of the ACM special issue, 50*(3), 54-58.
Palen, L., Vieweg, S., Sutton, J., Liu, S. B. & Hughes, A. (2007) Crisis informatics: Studying crisis in a networked world, *Third International Conference on E-social Science.* Last accessed on March 24, 2012at http://ess.si.umich.edu/papers/paper172.pdf.
Parsons, T., (1951), *The Social System*, New York:Free Press.
Patton, M. (1999). Enhancing the quality and credibility of qualitative analysis, *Health Services Research, 34* (5), 1189-1208.
Patton, M. Q. (2002). *Qualitative evaluation and research methods*. Thousand Oaks, CA: Sage.
Perry, B. (2003). Where do we go from here? Researching hate crime. *Internet Journal of Criminology*. Last accessed on March 24, 2012at http://www.internetjournalofcriminology.com/
Perry, B., & Olsson, P. (2009a). Cyberhate: the globalization of hate. *Information & Communications Technology Law, 18* (2), 185-199. doi: 10.1080/13600830902814984
Perry, B., & Olsson, P. (2009b). Hate crime as a human rights violation. In B. Perry (Ed.), *Hate Crimes*, Westport, CT: Praeger Publisher.
Perry, J. B., and Pugh M. D., (1978).*Collective behavior: Response to social stress*. St. Paul, NY: West Publishing Company.
Pollock, E. T. (2006). Understanding and contextualizing racial hatred on the Internet: A study of newsgroups and websites. *The Internet Journal of Criminology.* Last accessed on April 22, 2014 at http://www.internetjournalofcriminology.com/Pollock_Racial_Hatred_on_the_Internet.pdf.
Pollock, E. (2009). Researching white supremacists online: methodological concerns of researching hate 'speech'. *The Internet Journal of Criminology.* Last access on April 22, 2014 at http://www.internetjournalofcriminology.com/Pollock_Researching_White_Supremacists_Online.pdf
Porter, C. E. (2004). A typology of online communities: A multi-disciplinary foundation for future research. *Journal of Computer-Mediated Communication*, 10 (1). Last accessed on March 24, 2012 at http://jcmc.indiana.edu/vol10/issue1/porter.html
Powell, A., Piccoli, G., & Ives, B. (2004). Virtual teams: A review of current literature and directions for future research. Database for advances in information systems, 35(1), 6-36.
Preece, J. (2001). Sociability and usability: Twenty years of chatting online. *Journal of Behavior and Information Technology,* 20 (5), 347-356.
Preece, J., Maloney-Krichmar, D. & Abras, C. (2003). History of emergence of online communities. In B. Wellman (Ed*.), Encyclopedia of Community*. Thousand Oaks, CA: Sage.

Przeworski, A.(1975). Institutionalization of voting patterns, or is mobilization the source of decay? *The American Political Science Review,* 69 (1), pp. 49-67.
Puri, A. (2000). The Web of Insights - The Art and Practice of Webnography, *International Journal of Market Research*. 49(3).
Quarantelli, E. L. (1965). Mass behavior and governmental breakdown in major disasters: viewpoint of a researcher. *The Police Yearbook*, 105-112.
Quarantelli, E. L. & Dynes, R. R. (1977). Response to social crisis and disaster. *Annual Review of Sociology,* 2, 23-49.
Ren, Y., Kraut, R. & Kiesler, S. (2007). Applying common identity and bond theory to design of online communities, *Organization Studies*, 28(3), 377-408.
Rhee, M., and Kim, Y. C., (2010). The contingent effect of social networks on organizational commitment: A comparison of instrumental and expressive ties in a multinational high-technology company, *Sociological Perspectives,* 53, pp479-502.
Rheingold, H. (1993). The online community: Homesteading on the electronic frontier. New York:Addison-Wesley.
Rheingold, H. (1993a). A slice of life in my online community. In L. M. Harasim (Ed.), *Global networks: Computers and international communication* (pp. 57-80). Cambridge, MA: MIT Press.
Richards, L. & Morse, J.M. (2007). *Readme first for a user's guide to qualitative methods.* Thousand Oaks, CA: Sage Publications.
Robertson, S., Vatrapu, R. and Medina, R. (2010). Off the wall political discourse: Facebook use in the 2008 U.S. presidential election. *Information Polity*, 15 (1,2), 11-31.
Robbins, S. P. (1999). *Organizational behavior*. New Delhi: Prentice Hall of India.
Ross, E. A. (1896). Social Control, *American Journal of Socioology,* 1(5), 513-535.
Rowley, J. (2002). Using case studies in research. *Management Research News, 25*(1), 16-27.
Rowley, J. & Slack, F. (2006). Conducting a literature review. *Management Research News, 27*(6), 31-39.
Rybas, N., and Gajjala, R. (2007). Developing Cyberethnographic research methods for
understanding digitally mediated identities. *Qualitative Social Research*,7(3).
Sagers, G. W., Wasko, M. M., & Dickey, M. H (2004). Coordinating efforts in online communities: Examining network governance in open source. *Proceedings of the Tenth Americas Conference on Information Systems*, New York, August.
Saldana, J. (2009). The coding manual for qualitative researchers. Los Angeles, CA: SAGE.
Sampson, J. P. Jr., (2012), A Guide to Quantitative and Qualitative Dissertation Research. *Educational Psychology and LearningSystems Faculty Publications.* Paper 1. Last accessed on January, 2014 at http://diginole.lib.fsu.edu/edpsy_faculty_publications/1
Sarker, S., Lau, F., & Sahay, S. (2001). Using an adapted grounded theory approach for inductive theory building about online team development, *Database for Advances in Information Systems*, 32(1), 38-56.
Sarker, S. & Sahay, S. (2002). Information systems development by US-Norwegian online teams:Implications of time and space. *Proceedings of the Thirty-Fifth Annual Hawaii International Conference on System Sciences (pp.1-10).*
Schackman, D. (2010). Commons or gated community? A theoretical explication of online community and the example of Craigslist, community informatics.*A Global*

e-Journal, 6(2). Last accessed on March 24, 2012 at http://ci-journal.net/index.php/ciej/article/view/457/628
Schank, R. C., and Abelson, R. P. (1977). Scripts, Plans, Goals, and Understanding. Hillsdale, NJ: Lawrence Erlbaum Associates.
Schein, E.H. (1988). *Organizational Culture and Leadership*, San Francisco: Jossey-Bass.
Schelling, T. C. (1960). *The Strategy of Conflict*. Cambridge, MA: Harvard University Press.
Schumpeter, J. A. (1954). *History of economic analysis.* New York: Oxford University.
Schwartz, E. (1995). Looking for community on the Internet. *National Civic Review*, 84, 37–41.
Schwartz, E. (1996). *NetActivism: How citizens use the Internet*, Sebastopol, CA: Songline Studios.
Scott, W. R. (1987). The Adolescence of institutional theory. *Administrative Science Quarterly*, 32 (4), pp. 493-511.
Scott, J. (2000) Social Network Analysis: A Handbook. Thousand Oaks, CA: Sage Publications.
Scott, R. (2007). Social innovations, institutional change, and economic performance: making sense of structural adjustment processes in industrial sectors, regions, and societies, 281, SITRA (Series), In Timo J. Hamalainen and Risto Heiskala(Eds), MA:Edward Elgar.
Scott, W. R., Ruef, M., Mendel, P. J., and Caronna, C. A., (2000). Institutional change and healthcare organizations: From professional dominance to managed care, Chicago:University of Chicago.
Scott, W.R. (2001). *Institutions and organizations,* Thousand Oaks, California: Sage.
Scott, W. R. (2003). Institutional carriers: Reviewing modes of transporting ideas over time and space and considering their consequences.*Industrial and Corporate Change* 12, pp. 879-94.
Scott, W.R., (2004) Institutional Theory. In Encyclopedia of Social Theory, George Ritzer, (Ed.), California: Sage, pp. 108-414.
Scott, W.R. (2008). *Institutions and organizationsideas and interests.*Los Angeles: Sage.
Selznick, P. (1949). *TVA and the grassroots: A study in the sociology of formal organization.* Berkeley, CA: University of California Press.
Selznick, P. (1957). *Leadership in administration: A sociological interpretation.* New York, NY: Harper and Row.
Selznick, P. (1992). *The moral commonwealth: Social theory and the promise of community.* Berkeley, CA: University of California Press.
Selznick, P. (1996). Institutionalism 'old' and 'new.' *Administrative Science Quarterly*, 41(2), 270-277.
Sewell, W. (1992). A theory of structure: Duality, agency, and transformation. *American Journal of Sociology,* 98(1).
Shinder, D. L., (2002). *Scene of the cybercrime - Computer forensics handbook*. Rockland: Syngress.
Smets, K., Goethals, B., and Verdonk, B. (2008). Automatic Vandalism Detection in Wikipedia: Towards a Machine Learning Approach. In *AAAI Workshop on Wikipedia and Artificial Intelligence*, pp. 43–48.

Sonnenbichler, A. C. (2010). A community membership life cycle model. Last accessed on 05/14/2014 at http://arxiv.org/pdf/1006.4271.pdf?origin=publication_detail.

Sosa, M. E., Eppinger, S. D. and Rowles, C. M. (2003). Identifying modular and integrative systems and their impact on design team interaction.*Journal of Mechanical Design*, 125, pp.240-252.

SPLC (1999). A History. *Intelligence Report (summer).*Last accessed on March 24, 2012at http://www.splcenter.org/get-informed/intelligence-report/browse-all-issues/1999/summer/the-great-creator/a-history

SPLC (2009). Behind the gunfire. *Intelligence Report, (summer).*Last accessed on March 24,2012at http://www.splcenter.org/get-informed/intelligence-report/browse-all-issues/2009/summer/behind-the-gunfire

Sproull, L. and Arriaga, M. (2007). Online communities, In H. Bidgoli (Ed.), *Handbook of computer networks, Volume 3, Distributed networks, network planning, control, management, and new trends and applications.* New Jersey:John Wiley & Sons. doi: 10.1002/9781118256107.ch58

Stake, R. E. (1995). *The art of case study research*. Thousand Oaks: Sage.

Stanton, J. J. (2002). Terrorism in cyberspace: Terrorists will exploit and widen the gap between governing structures and the public. *American Behavioral Scientists, 45(6)*, 1017-1032. doi: 10.1177/0002764202045006006

Steward, D. (1981). The design structure matrix: A method for managing the design of complex systems. *IEEE Transactions Engineering Management*, 28(3), pp.71-74.

Strauss, A. & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory.* Thousand Oaks: Sage Publications.

Streeck, W. & Schmitter, P.C. (1985). Community, market, state - and associations? The prospective contribution of interest governance to social order. In W. Streeck, & P. C. Schmitter (Eds.),*Private interest government*: *Beyond Market and State.* London:Sage.

Subba, R., & Bui, T. (2010a). *Convergence behavior in the blogosphere: The case of hurricane Katrina.* Unpublished manuscript. Obtained a positive assessment from CIS Board/Faculty.

Subba, R., &Bui, T. (2010b). An exploration of physical-online convergence behaviors in crisis situations. In R. Sprague (Ed.), *Proceedings of the 43rd Hawaii International Conference on System Sciences, pp.1-10.*

Subba, R., &Bui, T. (2012). Self-coordinated defense mechanisms against Cyberhate: An analysis of postings related to the 2010 Haiti earthquake on Facebook. In R. Sprague (Ed.), In R. Sprague (Ed.), *Proceedings of the 45th Hawaii International Conference on System Sciences*, *pp. 648-657. DOI 10.1109/HICSS.2012.521*

Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*. 20, pp. 571–510.

Suler, J. (2004). The online disinhibition effect, *CyberPsychology and Behavior*, 7(3), pp321-326. Last accessed on March 24, 2012 at http://lacomunidad.elpais.com/blogfiles/apuntes-cientificos-desde-el-mit/71994_Suler.pdf

Sumner, W. G. (1907). *Folkways: A study of the sociological importance of usages, manners, customs, mores, and morals.* Boston: Ginn & Co., Last accessed on March 24, 2012at http://www.gutenberg.org/files/24253/24253-h/24253-h.htm#Page_521

Suthers, D. D. (2006). A qualitative analysis of collaborative knowledge construction through shared representations. *Research and Practice in Technology Enhanced Learning*, 1(2), pp.1–28.

The Economist. (2008, July). The brave new world of e-hatred. *The Economist.*Last access on March 24, 2012 at http://www.economist.com/world/international/PrinterFriendly.cfm?story_id=11792535

Thomas, G., and Botha, R. A., (2010). Virtual communities as a mechanism for sustainable coordination within the South African public sector. In M. Janssen, W.Lamersdorf, J. Pries-Heje and M. Rosemann (Eds.): *EGES/GISP 2010, IFIP AICT* 334, 62–75.

Tiven, L. (2003). *Hate on the Internet: A response guide for educators and families*. Washington, DC: Anti Defamation League. Last accessed on March 24, 2012at http://www.partnersagainsthate.org/publications/hoi_full.pdf

Tolbert, P.S., & Zucker, L.G. (1996). The Institutionalization of institutional theory. In S. R. Clegg, C. Hardy and Walter R. Nord (Eds.), *Handbook of Organization Studies*, (pp.175-190), Thousand Oaks, CA: Sage.

Tuckman B. W.(1965). Developmental sequence in small groups. *Psychological bulletin*, 63 (6), pp. 384-99.

Turner, T., Fisher, D., Smith, M., & Welser, T., (2005). Picturing Usenet: Mapping computer-mediated collective action. *Journal of Computer-Mediated Communication,* 10(4). Last accessed on March 24, 2012 at http://jcmc.indiana.edu/vol10/issue4/turner.html.

Typaldos, C. (2000). The 12 principles of collaboration: Guidelines for designing Internet services that support group collaboration. *Fast Company magazine*, 38, September. Last accessed on March 24, 2012 at http://www.digitalplaces.biz/pages/12Principles-Collaboration.pdf and http://www.fastcompany.com/magazine/38/ideazone.html?page=0%2C2

Vaast, E. and Davidson, E. (2008). New Actors and New Media in Technology Discourse: An Investigation of Tech Blogging. *ICIS 2008 Proceedings*. Last accessed on March 24, 2012 at http://aisel.aisnet.org/icis2008/162

Viegas, F. B., Wattenberg, M., Kriss, J., and van Ham, F., (2007). Talk Before You Type: Coordination in Wikipedia. *Proceedings of the 40th Annual Hawaii International Conference on System Sciences*.

Vieweg, S., Palen, L., Liu, S., Hughes, A. and Sutton, J. (2008). Collective intelligence in disaster: Examination of the phenomenon in the aftermath of the 2007 Virginia tech shootings. *Proceedings of the 2008 ISCRAM Conference*, Washington, DC.

Vysotsky, S. (2003). *Countering Cyberhate: The history of and responses to hate group organizing on the Internet.* Eastern Sociological Society Annual Meeting. Last accessed on March 24, 2012at home.comcast.net/~vysotsky.s/Cyberhate.pdf.

Arnould, E. J. and Wallendorf, M. (1994). Market-oriented ethnography: Interpretation building and marketing strategy formulation, *Journal of Marketing and Research*, 31 (Nov), pp. 484-504.

Wang, X. and Yu Y. (2012). Classify participants in online communities. *International Journal of Managing Information Technology*, 4(1). DOI : 10.5121/ijmit.2012.4101 1.

Weber, M., (1947) The theory of social and economic organization. Translated by A.M. Henderson and Talcott Parsons. London: Collier Macmillan.

Wellman, B. and Gulia, M. (1999). Net surfers don't ride alone: Virtual communities as communities. In B. Wellman (Ed.), *Communities in Cyberspace*, Boulder, CO: Westview Press. Last accessed on March 24, 2012 at http://homes.chass.utoronto.ca/~wellman/publications/netsurfers/netsurfers.pdf

Welsh, E. (2002). Dealing with Data: Using NVivo in the Qualitative Data Analysis Process. Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 3(2). Last accessed at http://nbn-resolving.de/urn:nbn:de:0114-fqs0202260 on 04/18/14.

Wenger, E., McDermott, and Snyder, W. (2002). *Cultivating Communities of Practice: A Guide to Managing Knowledge.* Cambridge, MA : Harvard Business School Press.

Wenger, E., White, N., & Smith, J. D. (2009). *Digital habitats: Stewarding technology for communities.* Portland, OR: CPsquare.

Whine, M. (1999). Cyberspace: A new medium for communication, command and control by extremists. *Studies in Conflict and Terrorism, 22*(3), 231-245. doi: 10.1080/105761099265748

Whine, M. (1999). The use of the Internet by far right extremists. In Douglas Thomas and Brian D. Loader (Eds.), *Cybercrime: Security and Surveillance in the Information Age* (pp.234-250). London: Routledge. Last accessed on March 24, 2012at http://www.ict.org.il/Articles/tabid/66/ArticlsSearch/whine/Articlsid/720/currentpage/1/Default.aspx

Williamson, O. E., (1979). Transaction-cost economics: The governance of contractual relations, *Journal of Law and Economics*, 22(2), 233-261.

Wilson, D. R., (2004). Researching sociology on the Internet, Wadsworth, Thompson: Belmon, CA.

Winegardner, K. E. (2004). *The case study method of scholarly research.* Last accessed on March 24, 2012 at https://uascentral.uas.alaska.edu/onlinelib/Summer-2007/PADM635-JD1/Windgardner___case_study__research.pdf

Yin, R. K. (1993). *Applications of case study research*. Newbury Park, California: Sage.

Yin, R. K. (2003). *Case study research: Design and methods.*Thousand Oaks, California: Sage.

Zhang, Y.,& Wildemuth, B. M. (2009). Qualitative analysis of content. In B. Wildemuth (Ed.), *Applications of Social Research Methods to Questions in Information and Library (pp.308-319).* Westport, CT: Libraries Unlimited.

Zittrain, J. (2008). *The future of the Internet and how to stop it.* New Haven, CT:Yale University Press.

Zucker, L.G. (1977). The role of institutionalization in cultural persistence. *American Journal of Sociology*, 42, pp.726–743.

Zucker, L. G. (1983). Organizations as institutions. In S. B. Bacharach (Ed.), *Perspectives in Organizational Sociology: Theory and Research*, 2, pp.1-47.

Zucker, L. G. (1988). Where do institutional patterns come from? Organizations as actors in social systems. In L. G. Zucker (Ed.), *Institutional Patterns and Organizations; Culture and Environment* (pp.23-49). Cambridge, MA: Ballinger.

Appendix

Comments are definitions I used to code the data.

Codebook

ADVOCACY ANTI-CYBERHATE ALLIANCE

Comment:

Anti-Cyberhate alliance is a group of people who created a anti-hate group called Racism is Scishm on FB. They monitored the parent group and posted all the offenders names on the splinted group.

ANTI-OFFENDING - STRATEGY

Comment:

Anti-Offending: Against the offending particularly regarding inappropriate comments including cyberhate.

CHARITY

Comment:

Charity: the voluntary giving of help to those in need.

COLLABORATION

Comment:

Collaboration is members of the ACH group working with each other to do anti-cyberhate tasks and to achieve shared goals of controlled site and no presence of cyberhatred messages.

COMMUNICATION:: ACCURATE COMMUNICATION

Comment:

Do they (e.g. Admin) in these (functions) communicate with other Admin accurately about the status of ACH?

COMMUNICATION:: FREQUENT COMMUNICATION

Comment:

How frequently do they (e.g. Admin) communicate with each of these (functions) about the status of ACH?

COMMUNICATION:: PROBLEM SOLVING COMMUNICATION

Comment:
Do they blame or share responsibility when something goes wrong?

COORDINATION

Comment:
COODINATION: Coordination is the act of organizing anti-cyberhate activities and making members of the group work together for an effect anti-cyberhate efforts.

DETECTING

Comment:
The detectives are netizens who search and investigate about the offenders.

EFFECTIVE OUTCOME

Comment:

Expected outcome

ENFORCING

Comment:
Act of Enforcer: The enforcers charged with keeping dissident members obedient.

EXPECTATIONS

Comment:
Fulfillment of duty or comply with norms that are expected by others.

Guide:: XXX X XXXX9

Comment: The guide

GUIDING

Comment:
The guide shows a way by leading, directing, or advising and serve as a model for others.

HELPING

Comment:
The helpers assist by providing information about offending postings and offenders.

IDENTITIES

Comment:
Identities: Members represent themselves and others.

JOBS

Comment:
Tasks or work members (Admins too) are supposed to do.

MONITORING

Comment:
The monitors observe, review actions of others and remind not to post offensive postings. They flag offending posts and help the enforcers.

MUTUAL RESPECT

Comment:
Do they respect each other and the work each other do for ACH?

NOTICE

Comment:
Posting of updates.

OFFENDER CHARACTERISTICS

Comment:
Traits of offenders.

OFFENDERS STRATEGIES

Comment:
Plan of actions of offenders.

PROFILE IMAGE

Comment:
The picture of the group or person on the profile page.

PROTOCOLS

Comment:
A structure which gives sense of hierarchy.

PURPOSE OF THE GROUP

Comment:
Objective of the group.

REPORTING

Comment:

Informing to specific role in the group.

ROLES

Comment:
Roles: Members of the anti-cyberhate FB group.

RULES

Comment:
Rules: a set of principles how members should behave in a group.

SHARED GOALS

Comment:
Shared goal: Sharing each others goals regarding ACH efforts.
To what extent do people share each other's goals vis-à-vis ACH?

SHARED KNOWLEDGE

Comment:
Shared knowledge: Knowledge about each others work regarding ACH efforts.
How much do people in these functions know about the work others do?

SOPs

Comment:
SOPs: Standard operating procedures. SOPs are uniformed instructions that are followed my a group of members.

TIMELINESS OF COMMUNICATION

Comment:
Do they (e.g. Admin) in these (functions) communicate with each other in a timely way about the status of ACH?

VALUES

Comment:
Values: sense of right and wrong.

WARNING

Comment:
To post a warning notice.

END OF DOCUMENT