Insurgency on the Internet: Organizing the Anonymous Online Community

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BOSTON COLLEGE



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INSURGENCY ON THE INTERNET: ORGANIZING THE ANONYMOUS ONLINE COMMUNITY

A Dissertation submitted in partial satisfaction of the requirements for the Doctorate of Philosophy in Organization Studies

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ABSTRACT

Online communities support collective action without many of the constraints that have belied collective actors and formal organizations in the past. They have become increasingly pervasive platforms for activism as well as potential catalysts for novelty in organizing practices. Scholars have shown that by leveraging affordances of the Internet, these communities have displaced or become complements to face-to-face organizations such as churches, community centers, labor unions and political groups that have traditionally structured civic engagement. Few empirical studies, however, systematically address how *processes* ranging from mobilization to the coordination of complex, large-scale collective action and *practices* that enable and support these processes are different in online environments. In this dissertation, I provide conceptual background that supports the study of online communities as dynamic and diverse modes of civic engagement. I reveal how locations, boundaries, interactions and identities are instantiated differently in online communities, influencing processes and practices that are crucial to social change. Using Internet-based ethnographic methods, I examine: (1) how an online community called 'Anonymous' experiences shifts in purpose as it transitions from being focused on recreation to becoming both an incubator and support system for several social change projects and (2) how the community adopts a repertoire of coordinating practices that allows it to organize complex projects.

KEY WORDS: Online Community, Collective Action, Purpose, Coordination, Internet-based Ethnography

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1 INTRODUCTION

Online communities have become pervasive, increasingly sophisticated and culturally rich forms that support interaction (Wellman et al. 2003) and influence how individuals engage in collective action, upending many of the constraints that have belied traditional, bureaucratic organizations in the past (e.g. participation risks, organizational maintenance costs). They exist in computer-mediated space characterized by repeated user interactions and member-generated content (Hagel and Armstrong 1997) and have been referred to as "voluntary collection[s] of actors whose interests overlap and whose actions are partially influenced by this perception" (O'Mahony and Lakhani 2011). For over a decade, online communities have had the distinction of being the fastest growing category of Internet-based social phenomena (as reported in Wingfield and Hanrahan 1999, and Earl and Kimport 2011). The Pew Research Center's Internet & American Life Project (2011) estimates that 80 percent of North American Internet users (nearly 196 million people) participate in online communities where they might provide social support, engage in discussion of social and political issues, coordinate software production, exchange ideas for the sake of recreation or focus on the advancement of a civic purpose (e.g. activism). Indeed, the Internet and the online communities that populate it have become an important source and discussion platform for "things that matter" to contributors (Wenger 1999), within and outside online environments. The Annenberg School's Center for the Digital Future's 2011 report suggests, for example, that increases in online participation has led to greater involvement in offline activism by noting that thirty-two percent of online community contributors claim they take actions offline at least monthly that are related to and coordinated through their online community.

Scholars across several disciplines, most notably social movement and organizational theorists (see Marquis, Lounsbury and Greenwood 2011 and Brint 2001), have highlighted the importance of understanding the community form - whether online, offline or as an hybrid that straddles online and offline environments - as a platform for collective action and as a source of economic, social and political

change. They posit that unlike bureaucratic modes of organizing, community forms need not attend to efficiency and predictability imperatives or become encumbered by fixed coordination and control structures (Adler 2001, Earl and Kimport 2011, Seidel and Stewart 2011). This distinction allows communities to preserve divergent goals and identities and produce innovation and countervailing solutions to social problems (Chen and O'Mahony 2009). Communities can also pose a competitive threat to organizations by creating barriers to their continued success (King and Soule 2007). In addition, community-based collective action may serve as a catalyst for the formation of new organizing practices (Rao, Morrill and Zald 2000) and a threat to existing modes of organizing that do not recognize and attend to community concerns (Marquis and Lounsbury 2007). Moreover, communities can be cradles of novel ideas and structures that both seed and sustain social movements (Calhoun 1998, Morris 1986). As such, they remain a fundamental source of resistance to or change in social practices, markets and ideas that, until recently, have been relegated to the "shadow of organizations" (O'Mahony and Lakhani 2011).

The advent of the Internet as a platform for interaction has resulted in new "occasions" for structuring (Orlikowski 1995; Barley 1986) social life, rekindling scholarly interest in communities, particularly those that originate or exist largely in online environments. As electronic communications have advanced, they have made it possible for communities to overcome time and distance constraints which stood as barriers limiting interactivity and interconnectivity (Castells 2003, Fulk and DeSanctis 1995). Extant studies show that collective action that is supported by online community is organized in diverse but seldom explored ways (Wellman et al. 2003, Earl and Kimport 2011). Studies have documented innovations stemming from online communities in industries and activities ranging from computing, software, automobiles, crafts, astronomy, and sports (see Shah, 2006). Bennett and Fielding (1999) have studied, for instance, how online communities and mobile media have enabled "flash activism", a new form of activism in which organizers no longer need to engage in grassroots cultivation of support for a cause. Instead, activists find support in existing communities of mobile phone, Facebook, or online forum users, allowing for rapid and low cost mobilization. Organization theorists have studied

how technical online communities that are part of the open source movement govern themselves without vertical authority structures (O'Mahony and Ferraro 2007, Shah 2006), revealing how coordination of complex tasks is viable and distinct in these environments. Jennifer Earl and colleagues (Earl and Shussman 2003, Earl and Kimport 2011) label the enabling features of the online environment that make these differences tenable as 'affordances' of the Internet. These affordances provide opportunities for communities to engage in collective action in new ways and for scholars studying these communities to clarify the contingencies that differentiate offline and online organizing. The term community, instead of network or collective, is used to describe these groups, because they tend to adopt a social structure by which identification with the collectivity, rather than ties to specific individuals, tends to motivate cooperation and sharing of ideas and resources (Hertel, Niedner and Herrmann 2003).

Self-organizing online groups, rapidly assembled "mobs" of protesters, "meet ups", new interest group structures, and "viral" memes are all examples of collective behaviors observed by scholars investigating communities that have employed the Internet to incite social change in innovative ways. These endeavors have stimulated debates and prompted questions of whether collective action that is reliant on the Internet, which I call Internet-based collective action, can be explained using theories conceptualized to understand traditional collective action (Bimber 2003, Norris 2001). Some scholars have focused their efforts on identifying aspects of collective action that can be conducted more cheaply or quickly online, as well as possible shortcomings of online organizing (McCaughey and Ayers 2003). For example, studies have shown that the perceived cost of contributing to collective actions using contemporary electronic tools is either relatively low (Fulk et al. 2004) or seen as largely immaterial by users (Yuan, Fulk, Shumate, Monge, Bryant and Matsaganis 2005). Other studies suggest that the well-established prediction that collectives will formalize to adapt to certain information exchange and coordination functions (Zald and Ash 1966), might not hold for online forms (Earl and Kimport 2011). In fact, Internet-based collective action exhibits several types of loosely coupled informal structures that are

noted for their high adaptability and lack of formal authority structures (Bimber 2003; see also "smart mobs", Rheingold 2003).

Although several occasions have been reported when the behaviors of users in online communities buck theory developed prior to the advent of the Internet, few empirical studies systematically address the changes in organizing *processes* ranging from mobilization to the coordination of complex, large-scale collective action and *practices* that enable and support these processes. Changes in process involve differences in "how things evolve over time and why they evolve this way" (Langley 1999: 692) and changes in practices entail modification to recurring behaviors used to advance particular actions. If collective action is "the outcome of complex processes...mediated by certain networks of belonging" (Melucci 1996: 18), it stands to reason that changes in the content of networks of belonging (e.g., the dimensions that produce the shared bonds of community) and the ways in which they are mediated (i.e. through an online environment) will lead to changes in the production of collective action and the practices that sustain it. Without a clear understanding of how these and other changes alter online community engagement in collective action, we will remain unable to understand how the advent and widespread use of the Internet, one of the largest engines and platforms for social and economic change (Melucci 1996) has produced challenges to organizational (e.g., O'Mahony 2003) and social movement (e.g., Earl and Kimport 2011) scholarship. In particular, work examining how communities engage in and coordinate collective action will no longer reflect new, computer-mediated ways of organizing. Addressing this gap has become increasingly pressing given most collective actors, ranging from protest groups to entrepreneurial ventures, now emerge out of online communities or possess a major online component (The Pew Research Center's Internet & American Life Project 2011).

To build on the work of online community scholars and elaborate theories that shed light how communities engage in and coordinate collective action, I conduct an inductive, ethnographic investigation that attends to technological and cultural elements as enabling conditions for collective action (Pinch and Swedberg 2008). I examine two puzzles, selected because they cover two processes

necessary for successful organizing, defined here as "...purposeful, consciously coordinated social action" (Robbins and Judge 2009, p.6 drawing on Simon, 1957). First, I investigate how an online community experiences shifts in purpose; it transitions from reveling in activities that are largely internally-focused, to engaging in activism, to becoming an incubator, support system and gateway for civic participation. Second, I focus on how coordination of collective action that supports these activities is possible despite a lack of face-to-face interaction and traditional, bureaucratic authority structures or the use of personal identifiers (e.g., usernames, proper names). I trace online, community-based collective action processes from community formation, to the initial mobilization stages and, ultimately, to the shaping of coordinated effort required for social initiatives. I contribute to ongoing efforts in both organization studies (Chen and O'Mahony 2009; O'Mahony and Lakhani 2011, Shah 2006, Jepperson and Frederiksen 2006) and social movements (Earl and Shussman 2003, Earl and Kimport 2011) that have newly converged to explain online community organizing.

The context of the study is an online community called "Anonymous", whose contributors shift from participating in online forums focused on recreation such as politically incorrect pranks, the exchange of lewd images and the discussion of controversial ideas to engaging in a series of social change projects in support of a variety of aims. Anonymous uses Internet-based technologies, is immersed in a strong anti-authoritarian, "prankster" culture and has become involved in various social initiatives across multiple fields. It is an "extreme" case (Eisenhardt 1989) in which key differences between computermediated and face-to-face organizing, such as changes to how users participate in protests and the increased malleability of user identities, are readily apparent and accessible for study. Altogether, these features make it an ideal setting to answer calls for "researchers to rethink how they conceptualize the processes that lead to the formation of collective actors" (McCammon 2001: 471) and to examine organizing processes and associated practices in varied cultural and structural contexts (Johnston and Snow 1998).

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The subsequent chapter sets up a conceptual basis from which to study online communities. I outline how the ways in which communities organize for social change is influenced by new, online affordances. I also review how the online environment enabled collective actors to engage in activism in new ways. Chapter 3 provides a detailed description of data collection, analysis and interpretation methods used in this dissertation. Chapter 4, an empirical chapter, focuses on the process that Anonymous undergoes as it transitions from being focused on recreation to being engaged in activism and, ultimately, to serving as an incubator, support system and gateway for civic participation. Chapter 5, a second empirical chapter, complements the previous chapter through an exploration of how practices that engender integrating conditions for coordination evolve into a repertoire of coordinating practices and thus enable collective action in online environments. Finally, Chapter 6 concludes the dissertation with an overview of contributions to theory, limitations and future research directions.

2 THEORY: RE-CASTING COMMUNITY IN A CONNECTED WORLD

The engagement of online communities in various forms of collective action has been touted as an important and timely area of study by scholars and practitioners alike (Earl and Kimport 2011; O'Mahony and Lakhani 2011; Shirky 2008). Studies point not only to the growing proliferation and influence of online communities, but also to the activities of online communities that challenge preconceptions of how collective actors mobilize and coordinate in pursuit of social change (Wellman et al. 2003). For instance, scholars have suggested that online community users seldom devote themselves to a single issue or participate in a single community (Wellman et al. 2003), challenging the notion of a bounded and restrictive community that places unyielding demands on one's time (Putnam 2000). Others point to lack of attachment of users and the online communities they populate to geographic location, touting the notion that a single user can now mobilize a geographically dispersed, Internet-based movement (Earl and Kimport 2011) instead of requiring financial resources to generate "strength in numbers" (Tilly 1978).

The broad aim of this chapter is to provide conceptual background that enables the informed study of online communities as distinct modes of engagement in civic life (Putnam 2000, Hecksher and Adler 2006). I argue that to understand how and why online communities engage in any form of collective action we must first define the term community and how key dimensions that support how communities organize are instantiated differently online. I focus on community, whether online or offline, as dynamic forms of organizing, reviewing extant theories and research that sensitize the reader and build a foundation to support empirical findings. I then turn to establishing the impetus for the study of purpose and coordination that drive this dissertation.

Transcending Gemeinschaft and Gesellschaft: From Early Theories to Recent Developments

The concept of community has had a long and intricate history in the social sciences, and is most often traced back to the work of Ferdinand Tönnies and Emile Durkheim who both sought to better understand communities and the relationships and interactions that sustain them (Tönnies 1887/2001, Durkheim 1893/1984). Tönnies formulated his theories in a time when the agrarian culture of his native Germany was being transformed by industrialization and a new money-economy. He found that two ideal types of community were useful for analytical comparison: *Gemeinschaft* and *Gesellschaft*.

The first type, *Gemeinschaft*, refers to the families, tight-knit neighborhoods, and small villages that Tönnies observed in rural Schleswig-Holstein. *Gemeinschaft* describes associations in which individuals are oriented to the interests of a collective as much as, if not more than, their own self-interest. These individuals are typically regulated by closely-held beliefs about what constitutes appropriate behavior instilled through powerful and stable socialization mechanisms such as family and religious rituals. These mechanisms ensure adherence to community norms, as well as a sense of responsibility to and trust in the community, its guiding principles and authority structures. As such, this form of community is marked by "unity of purpose", not the autonomous pursuit of individual will (*Wesenwille*) (Tönnies 1963/2001: 22). Putnam's (2000) descriptions of the idyllic American small towns of the 1950's and 1960's, for instance, evoke *Gemeinschaft* by portraying individuals deeply embedded in community through shared activities such as church meetings and bowling leagues.

In contrast, *Gesellschaft* describes associations in which individual self-interest takes precedence over the interests of the collective. Primary sentimental relationships predominate in *Gemeinschaft* while secondary associational relationships which are often 'arms-length' and based on 'thin' forms of interpersonal trust are typical of *Gesellschaft* (Hecksher and Adler 2006: 13). These associations are characteristic of the cosmopolitan forces of industry and markets faced by Tönnies and his countrymen: short-term relationships, individual accomplishments, and self-interests were crowding out personal ties, family connections, and life-long friendships. Scholars often point to the 'business community', including markets characterized by legal-rational enforcement of contracts (Weber 1947), as reflective of *Gesellschaften* in that individuals are tied together by contracts and professional norms rather than friendship or kinship ties.

Durkheim, whose environment was beset by similar forces, suggested a different approach to the study of community. Instead of attempting to identify ideal types of community, Durkheim focused on the nature of relationship ties that characterized community forms. While he cited Tönnies' work and engaged with his ideas of community, Durkheim (1933/1984) and other sociologists (e.g., Wirth 1926) were critical of Tönnies' focus on community as a holistic social structure or entity, deeming such an over-arching and complex construct un-amenable to systematic study. Instead, their focus was on extracting elements associated with communal relationships and positing that these would have a discernible and empirically testable influence on individual and collective behavior. Solidarity, one of these elements, is seen by Durkheim as integral to all forms of community because it supports the ties that bind individuals within the community together. Durkheim suggests that mechanical solidarity describes the ties of *Gemeinschaft*, i.e. the lockstep connections between morally homogenous populations bound by similar values and beliefs. Organic solidarity is the result of Gesellschaft ties, i.e. the loose connections between diverse populations held together by interdependent roles (as in professional communities) as well as laws and contracts. Durkheim points to the web of interdependence made possible through organic solidarity as enabling people to build trust notwithstanding the absence of the traditional values enforced through Gemeinschaft ties.

Both Tönnies' and Durkheim's theorizing, as well as the work of sociologists that built upon their work, echo the struggle to understand a world in transition from the easily comprehensible ties of village life to the perplexing world of fast-paced, urban living. Their experience of a world in which village ties were being dissolved prompted them to postulate that *Gesellschaften* were unable to sustain long term human relations and a sense of moral order, producing anomie (Durkheim 1893/1984), among other social issues and sources of dysfunction. Some scholars noted that modern life had become "impersonal, transitory and segmental" (Wirth 1938: 12). Others celebrated the advent of and sought to advance

modernity, suggesting that *Gemeinschaft* was restrictive, stifling innovation, oppressing minorities and their voices, as well as lacking in flexibility to adapt to social change (Brint 2001). This tension between community types and the forms of association they engender has been a topic of discussion that has spanned disciplines for well over a century.

In spite of the widespread notion that one form of community would clash with and "progressively corrode" the other (Adler and Heckscher 2006: 14), scholars have continued to search for a form that resolves this tension, allowing for the efficiency and scalability of *Gesellschaft* while retaining the tight human relations that sustain *Gemeinschaft*. In effect, they seek to move away from nostalgically bemoaning the erosion of small village-like aggregations characterized by lifelong ties, to looking for new forms of community that allow for both high particularism (i.e., attachment to the interests and relations of one group) and universalism (i.e., attachment to interests that transcend single social groups) (Putnam 2000). In this search, they have suggested new definitions for community, made arguments for why one type of community form functions better or is more sustainable than another and even founded new disciplines (e.g., Community Studies) charged with studying new community forms.

Unfortunately, even though it is acknowledged as foundational to many social sciences, the concept of community has been intermittently abandoned and revived by scholars in sociology, geography, anthropology, and archeology over the past several decades. This volatility is often ascribed to frustration caused by thorny arguments over definition and growing convolution regarding what constitutes community brought on by scholarly efforts that were, ironically, striving to make the notion of community more accessible (Block 2009). According to Hillery (1955): "as an element in the sociological vocabulary, [community] has been used in so many ways that it has been described as an omnibus word" (p. 779). A selection of definitions employed by several sociologists and community theorists is presented in Table 2.1.¹

¹ Whereas I limit the number of definitions included here to those used by sociologists, political theorists, scholars of community studies, and severalothers have offered their own definitions. Given the sociological

Insert Table 2.1 about here

An important trend is immediately noticeable when definitions are placed in chronological order. Early definitions, including those proposed by Tönnies and Durkheim, place emphasis on location as a key dimension of community. After the review by Hillery (1955) notes the prominence of location in extant definitions, scholars turn to describing community in terms of the nature of interactions inherent in communal relationships (Freilich 1963) and, subsequently, the importance of symbolic boundaries in modern iterations of community (Cohen 1985). More recent definitions are diverse; some remain location-focused (e.g., Block 2009) and others that abjure location in favor of a more subjective view in which community is defined by how social actors perceive it to be bounded (e.g., O'Mahony and Lakhani 2011).

Recent review articles and meta-analyses that strive to make this complexity manageable have categorized communities in a variety of ways and posited several dimensions that enable comparisons of community forms that don't fit neatly into Tonnies' and Durkheim's original formulations (e.g. Brint 2001, Lee and Newby 1983). Concurrently, scholars have suggested that the term community is undergoing yet another recasting – one that embraces community as a fluid concept that is redefined in novel and often unexpected contexts (Wellman et al. 2003), both symbolically (Cohen 1985) and well as organizationally (Seidel and Stewart 2011; Marquis, Lounsbury and Greenwood 2011). Instead of viewing the world in dualistic terms (e.g., Gemeinschaft *versus* Gesellschaft), scholars have taken to conceptualizing community as being multi-dimensional and often characterized by a complex web of relationships (Brint 2001) which produce various community forms. Heckscher and Adler argue that the breakdown of boundaries between individuals made possible by a technology-driven, globalized world has "stimulated significant progress towards a new form of community" (2006: 12). They theorize a

orientation of this dissertation, I elected to narrow the scope of the content presented to that which I deemed most relevant to the discussion. For a recent, comprehensive review focused on defining community across disciplines see the article by Brint (2001).

"collaborative community" form that is neither *Gemeinschaft* nor *Gesellschaft* but a dialectical synthesis of these traditional opposites, calling for studies that examine forms not guided by markets or traditional authority structures, but by communitarian norms and values. The collaborative community is conceived of by the authors as transcending debates of tradition vs. freedom, of Gemeinschaft vs. Gesellschaft, universalism vs. particularism, instead embodying many of the elements that make communitarian relations useful to individuals and generative of norms and values. A collaborative community is characterized by a shared ethic of interdependent contribution, some formalized set of norms for coordinating activities, and some sort of social identity (Heckscher and Adler, 2006, p.2).

Scholars have offered, however, few empirical examples that might compellingly illustrate this and other new forms of community and few definitions that attend to communities that are not locationbound, based on long-term personal relationships or joined through some formalized organization. An emphasis on affect, loyalty, personal concerns and other factors that support interpersonal trust can lead to the exclusion of communities that have a more instrumental orientation (e.g. Merton's "scientific community"). In essence, communities that are not necessarily sustained by close-knit personal relationships (e.g. online communities of software developers or gamers) are excluded because the interactions that sustain the sharing of ideas, cooperation and identity-building don't fit what one would expect to find in village life (Earl and Kimport 2011). So, to be inclusive of different types of communities, particularly online instances which are the focus of this dissertation, I base my definition of community in part on O'Mahony and Lakhani's (2011) modification of Jochen Gläser's (2001) definition as, "a voluntary collection of actors whose interests overlap and whose actions are partially influenced by this perception." I also believe, however, that a complete definition of community should include a collective or shared identity component that allows one to distinguish an interest group holding no shared bond beyond the pursuit of common interest, from a community. That is, community isn't simply about common interests (as is the case for any interest group), but also about a shared identity, or a set of collective, self-referential meanings (Pratt, 2003), that motivates cooperation and sharing of ideas and

resources (Hertel, Niedner and Herrmann 2003). I seek to integrate more traditional and modern notions of community by defining the form as *a voluntary collection of actors bound together by a common social identity, space and purpose, whose actions and interactions are influenced by these shared bonds.*

This definition has several advantages. First, it enables an understanding of variations between the social orders of various communities caused by what the members perceive to have in common and not by some pre-defined notion of what constitutes community. Moreover, by conceiving of communities as entities formed based on overlapping interests and a shared identity, the definition captures newer forms of community, such as online communities, that do not fit many established definitions (Wellman and Giulia 1999). By capturing 'space' rather than 'location', I allow for the inclusion of virtual or online forms of community that would have been excluded by definitions that consider geography as central to community interaction. Also, by restricting the scope of community to include only associations in which actors participate voluntarily, this definition does not need to rely on categories used by observers that are not part of a community (e.g. those based on visible ethnic traits) and enables comparison with other forms of voluntary association such as markets, organizations and networks. Given the focus of this dissertation is on online communities, I narrow the scope of discussion to examine dimensions in which online or Internet-supported communities might be instantiated differently from their traditional, face-toface counterparts.

Online Community: Fundamental Dimensions and Distinctions

Until recently, studies have characterized the Internet as a culturally impoverished medium devoid of social cues and lacking the same richness as physical contexts (see Bordia 1997 for a comprehensive overview of research on the loss of social cues in online interaction). In many of these studies, online interactions are described as leading to low comprehension, as well as one-dimensional and more ambiguous impression formation (Hancock and Dunham 2001). Others suggest that online interaction provides either an escape from or a substitute for offline communities, implying that

engagement in online community leads to the fragmentation of offline ties (e.g. Nguyen and Alexander 1996). In essence, these studies claim that online communities "encourage us to ignore, forget, or become blind to our sense of geographic place and community" (Doheny-Farina 1996: 14). In the late 1990s, however, scholars across various disciplines began to cohere around the idea that the Internet and the online aggregations (e.g. communities, game worlds, etc.) that populate it had moved beyond many of the limitations mentioned in earlier studies, pointing to the rich webs of interaction have proliferated on the Internet as well as to their positive influence on offline communitarian activities (Digital Future Report, Annenberg School 2010). In doing so, they countered the widespread view that the Internet was an impoverished source of relationships lacking a 'human element' (Kozinets 2009) with empirical studies that revealed that online interactions are not only multifaceted, but rich in cues and content (see Hine 2000 for a review).

These scholars suggest that increased interconnectivity (i.e. the ability to reach out to anyone at any time) and interactivity (i.e. the ability to interface with others in ways that simulate real-world conditions) made time and space less onerous obstacles to communication, leading to a change in networks of relationships, boundaries within and between communities, authority structures, and other dimensions that enrich social life. That is not to suggest that all online communities share the same characteristics. In fact, extant studies highlight how online communities vary across these dimensions and are as diverse as traditional face-to-face communities (see Fayard and DeSanctis 2008 for a study that examines variance within the community form). Below I discuss several of these dimensions and elaborate on how each is manifest differently in online environments. These dimensions will serve as sensitizing concepts supporting a nuanced assessment of online communities. Table 2.2 presents an abridged overview of the dimensions.

Insert Table 2.2 about here

Locations. A location is "a position or site occupied or available for occupancy or marked by some distinguishing feature" (www.merriam-webster.com/location). Location has traditionally been conceived of as geographic – linked to place – or as connected to some abstract geometry in that it possesses distance, direction, size, shape and volume (Gieryn 2000). Geographic location has been central to many scholarly discussions of community forms in the past and is often used as a way to differentiate between community forms. Marcia Effrat's (1974) analysis of Hillery's (1955) 94 definitions of community, found that the most commonly included component in definitions of community was a shared geographical area. Shared geography orients relationships between individuals and serves as an axis for commonalities to be cherished and perpetuated (Brint 2001). Okhuysen and Bechky (2009) note that proximity breeds familiarity, allowing individuals to learn the norms and rules of a collective from each other without establishing formal commitments and relationships. Location-bound communities such as neighborhoods are sustainable because geographic proximity enables the creation and maintenance of common interests and activities which, in turn, strengthen community. This strength is illustrated by Marquis and Lounsbury's (2007) study of the U.S. community banking industry. They show how resistance to entry and acquisition of community banks by out-of-town banks was both enabled and sustained by relationships and logics built through a shared geography. Malinowski's (1922/2010) ethnography of isolated tribes of the Trobriand Islands in Melanesia exhaustively illustrates an instance of community where individuals are not only attached to their location, but in which geographic location, namely the island, becomes a protagonist in rituals and other religious rites. In addition to geographic location, the location of community members relative to each other (i.e., co-location) has been used to distinguish extant 'types' of community. Even though most traditional notions of community emphasize co-location or co-existence in shared physical space, many communities are dispersed or become dispersed over time. The Romani community (also known by the derogatory term 'Gypsy'), who are widely dispersed, with their largest concentrated populations in Europe, especially the Roma of Central and Eastern Europe and Anatolia, followed by the Kale of Iberia and Southern France, are commonly cited examples. Much like

the Jewish diaspora, the Romani self-identify as a community despite dispersion by referring to a shared experience or history of struggle.

Although central to the formation and sustainability of *Gemeinschaft* forms that rely on face-toface interactions to sustain social ties, a shared location, in the traditional sense, is not vital to meaningful online interaction (Earl and Kimport 2011). Social media sites such as Facebook or Twitter, for instance, allows users to maintain larger networks of acquaintances or "followers" independent of geographic space through mechanisms such as instantaneous status updates. People in these online communities "can be considered to be members of the same symbolic community, even if they have never met in person or lived in the same country" (Calhoun 1991:108) because they share 'space' (McLuhan 1974).

In fact, metaphors related to "space" have been used to understand the connections that sustain online community by scholar and practitioners alike. Cyberspace, for instance, evokes a social setting that exists within a three dimensional construct of representation and communication. In his earliest descriptions of online community, Rheingold (2000) referenced cyberpunk writers such as Gibson (1984) as he conceived of cyberspace as using the metaphors of 'rooms' and 'sites'. Gieryn (2000:465) notes that "it is fascinating to watch geography and architecture become the means through which cyberspace is reckoned by designers and users". These metaphors and the technologies that made them possible, gave rise to what computer-mediated communication scholars refer to as spatiality – a distinct sense of place and location – experienced by individuals as they figuratively "transport" themselves into online software platforms.

This is not to say that geographic location is ignored by all online communities or considered immaterial by scholars. The Slow Food community founded by Carlo Petrini in 1986, for instance, which strives to preserve traditional and regional cuisine and encourage farming of local fauna and flora, uses Internet discussion boards to promote local cooking groups and lessons as well as to connect local farmers with customers. This effort often creates or strengthens ties between neighbors that share a passion for traditional and regional cuisines and disdain for fast-food (Petrini and Padovani 2006). Scholars continue to research the development of online communities within the context of geographical communities (Agre & Schuler 1997). Specific case studies such as Kuwaiti women's uses of the Internet for political action (Wheeler 2001) continue to be relevant and important to theory development. According to the Digital Future Report by the Annenberg School (2010) online communities have become increasingly pervasive outlets for interest groups that can exist both online and offline and that can enable users to physically engage with local chapters or restrict their participation to online forums. As of yet, with the exception of reports by practitioners (e.g. Petrini and Padovani 2006), there is very little research that explores how these communities transition from being online aggregations to engaging in the "real world" or straddling online and offline engagement. As Agre (1999) suggests, research would benefit from examining online and offline aspects of community holistically instead of seeing them as either irreconcilable opposites or static states.

Boundaries. Boundaries that separate the community from others are also distinct across community types and important to their conceptualization. Early definitions of community emphasized location and focused on physical boundaries as important determinants of who would be included in a community and who would be excluded (Effrat 1974) - a notion which made sense for agrarian communities and villages. More recently, emphasis has been placed on less tangible symbolic boundaries. Symbolic boundaries allow actors to "categorize objects, people, practices, and even time and space" (Lamont and Molnar 2002: 168). Actors in communities often struggle to define symbolic boundaries and compete to establish alternative systems and principles of classification. The notion of symbolically-bounded community implies not only commonality and inclusion, but also contrast and exclusion; generating a sense of belonging, but also ostracizing external others (Epstein 1992). Symbolic boundaries can, once established, become social boundaries which create unequal access to resources and pattern social interactions to create constraint.

The existence of a shared vocabulary (Loewenstein, Ocasio and Jones 2012) among community members implies that non-members are excluded via symbolic boundaries that may supplement physical boundaries (as in the case of location-based communities). In essence, community boundaries may "... be thought of, rather, as existing in the minds of the beholders" (Cohen 1985: 12) but have very tangible consequences. Is entering and exiting the community as a member or non-member easy? Are there barriers to entry and exit which make community boundaries more restrictive? Once inside the community are there additional boundaries to participation? To illustrate, one might examine Jewish Orthodox communities where entry and exit are particularly difficult. One must, for instance, not only obtain permission from a Rabbi, but also learn the language, rules and rituals that guide worship and marry a Jew before being accepted into Orthodox Judaism. Only then might one become an active member of the community and gain access to the social and professional networks it provides. Within the community, male and female members are segregated and have defined gender roles which remain part of community norms, both enabling and limiting interactions and advancement. Behavioral boundaries outline in sacred texts also abound, restricting diet, among other practices. Altogether, boundaries create the experience of being an Orthodix Jew and distinguish the community from others.

Online, markedly different social and symbolic boundaries from the well-delineated boundaries of *Gemeinschaft* communities have allowed individuals to turn their attention to and become embedded in different specialized networks. Instead of engaging and becoming socialized by a single community with distinctive social norms, people increasingly operate in a number of specialized online communities that rarely seize their undivided attention or require exclusive commitment to a single community (Wellman et al. 2003). As such, online communities' boundaries tend to be more permeable – individuals come together in community and disperse more often, contributing as much or as little as they would like to multiple communities. This newfound flexibility has made increased demand for diverse outlets of interaction and communication possible and allowed individuals to engage in what Wellman and colleagues calls "networked individualism" (Wellman et al. 2003). Networked individualism refers to the

notion that social actors are maneuvering through communities of choice where kinship, neighborhood and friendship contacts become more of a choice than a requirement (Wellman 1999). Rather than feeling a part of a single hierarchy or becoming immersed in a single community, people believe they belong to multiple, partial communities and polities. Developers in the Open Source software development communities, for instance, tend to participate in different communities simultaneously or sequentially, following the completion of a project, so that they can lend their expertise to different efforts and learn from varied sources (Von Hippel and Von Krogh 2003). That is not to say that the boundaries of online communities are all similarly enforced. Strict merit-based gatekeeping, for instance, limits entrance into the Debian software development community to those with demonstrated programming skills (O'Neill 2009). In fact, technical boundaries such as passwords, difficult entry procedures, and other means of exclusion and delimitation using software programming can reduce permeability. Popular social media platforms (e.g., Facebook or Twitter) require passwords for entry, secure banking sites might require several passwords and response to predetermined question, and many communities where users are unfamiliar with each other (e.g., Habbo Hotel) require the creation of profiles using a unique username and verifiable e-mail address. Few studies (see Chen and O'Mahony and 2009 for an exception), however, examine how the nature of community boundaries, whether symbolic or technical, can influence the purpose and related goals adopted by community members. This is the case even though "[b]oundary definition and management are likely to be critical for any type of community that strives to remain open...without jeopardizing the security and stability of their work" (Ferraro and O'Mahony 2012: 563). So, although we understand that online communities tend to have more porous boundaries and that users navigate across boundaries often, we know little about how these behaviors create new opportunities for re-structuring social life and activities such as recreation or activism.

Interactions. Interaction, in particular social interaction, can be defined as "a dynamic sequence of social actions between individuals who modify and adapt their behavior according to those of others"

(Raducanu and Gatica-Perez 2012: 2). The nature of interactions between community members or between community members, , allies and other parties external to routine community activities also sets community forms apart. In some communities, members are engaged in constant interactions, taking place often and producing a membership experience that can be simultaneously stifling or exhilarating (Poletta 1999). In these cases the community becomes central to its members existence, requiring a great deal of time, effort and intensity of interaction. In his description of "belonging" in a small, rural community Block (2009) notes that shopping in the same stores, having children that attend the same school, holding memberships in the same churches, as well as run-ins made more likely due to proximity, can create a thick web of relationships that can prove excessively intense for urbanite newcomers used to greater isolation. Many communities require less of their members and are accepting of less persistent contribution. The "Burning Man" community (Chen 2009), for instance, requires little of most of its members; organizers emphasize that members "create their own form of community."² Many Burning Man participants choose to limit interactions with community members outside of major gatherings while others become engaged in planning year-round. Finally, some communities require more service from higher status members, leaving lower status members to grow into responsibility. Many academic communities tend toward this model (Merton 1968).

Interactions with groups that are not a part of a focal community such as bystanders, allies, supporters, antagonists and others can also differentiate community types. Although some communities exist in relative isolation or remain closed to the scrutiny of external others (e.g. such as agriculture-based Kibbutzim in the Israeli countryside, Bok 2008), the shape communities take can be deeply influenced by the expressed expectations of those whose opinions they value or who have power over resources they need (McAdam, Tarrow and Tilly 2001). Attention from these external others is compulsory before, for instance, a community can engage in the sorts of behaviors that assuage social stigma and lead to broadbased legitimacy (Suchman 1995). Minkoff (1999) studies women's and radical minority communities

² http://www.burningman.com/participate/

who adopted strategies in order to garner greater legitimacy from external, resource-granting audiences. She finds, however, that signaling conformity to dominant institutional orders can be maladaptive, particularly when those changes dilute the core beliefs of the community. Interestingly, some studies have suggested that conformity and differentiation can be balanced through perception management (Elsbach 2006). In their study of two social movement organizations, ACTUP and Earth First!, Elsbach and Sutton (1992) argue that activists used controversial activities to generate publicity and more conventional activities such as press conferences and workshops to gain legitimacy for themselves and their social goals. Ultimately, leaders in the two social movement organizations were able to decouple the actions of radicals within their organizations from external perceptions of the organization as a whole, thus allowing the groups to achieve legitimacy from external others even though they continually deployed means thought to be illegitimate.

Communications-related developments have greatly influences the nature of interactions, even prior to the advent of the Internet. Time-space compression, whereby increasing speed of interconnection (whether by telegraph or by instant messaging) shortens the effective social distance between individuals, makes communication more immediate. Moreover, time-space distanciation, in which local times and spaces are melded into increasingly homogenous global units of measurement, make the coordination of activities by globally dispersed actors possible. Marshall McLuhan (1974) coined the term 'the global village' to explain how electronic media (radio and television in his time) made experiences more simultaneous and interactions more immediate, leading to a sense that someone across the world is more accessible and, for many purposes, "closer". The Internet added greater interactivity and accessibility to this village and further enhanced a sense of co-location.

These new interactions became diverse over time as programmers and hardware manufacturers continually enhanced user experience. Nowadays, interactions between users online range broadly in intensity, duration and in how often they occur. Users in massively multiplayer online role-playing games (MMORPG), where virtual game worlds are simulated and inhabited by digital characters, can engage in

intense experiences that last hours where they complete tasks and interact with other users and nonplayable characters (NPC) that are programmed with responses to user queries (Nardi 1999). Alternatively, users can participate in online discussion forums by making "micro-contributions" – small or sporadic changes or comments - to ongoing discussion threads as often or as rarely as is their preference (Benkler 2006). Distributed Proofreaders, an open-source project that "allow[s] several proofreaders to be working on the same book at the same time, each proofreading on different pages" (Proofreaders 2004), is just one example of a community that relies heavily on micro-contributions by casual or heavy users. Relatedly, communications between members may be synchronous (i.e. taking place in real time) or asynchronous, whereby a user leaves a comment that is responded to at a later time. Asynchronous communication enables interactions that take place on a single topic by individuals in opposite ends of the world, extending the range of individuals that can play an active role in online community and further de-emphasizing the importance of physical proximity.

The Internet has also made the communications of online communities more accessible to external observers, often blurring the boundary between members and external observers. Even though many communities create password-protected relational spaces where interactions can take place away from prying eyes, most adhere to open access policies that require anyone be allowed to interact with community members. In Correll's (1995) study of a Lesbian Café online, the discussions of the community were viewable to anyone who wished to see them. This was a point of pride for members, but often led to nuisance comments by interested others. Hancock and Dunham (2001) suggest further that unless users are familiar with other community members, it becomes difficult to distinguish community communications from noise created or deception perpetrated by others. Notably, as I suggest in my descriptions of the boundary dimension, lack of familiarity makes technical boundaries, such as passwords, and linguistic boundaries, such as immersion in a shared vocabulary more salient and pressing.

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Although we have catalogued and described the new types of interactions made possible with each online community form and interaction platform that surfaces, the influence of these interactions – both internal and with external others - on organizational processes and practices important to community development such as a guiding purpose that determines actions and the practices which support the execution of that purpose remains largely unexplored.

Identities. In Tönnies' Gemeinschaft community, an individual's physical attributes (e.g. skin color) and the social category to which he or she belonged (e.g. rich, farmer) were easily ascertainable through face-to-face interaction. Just as in Putnam's (2000) idyllic communities of the early 20th century, everyone knew everyone else and often the family, ethnicity, profession and social class to which that person belonged. In fact, the many ways in which different identities are enacted by social actors can help in the examination of communities.

Although there are many ways to understand identity, in this dissertation, I focus on three theorizations of the identity construct that I have found to be analytically useful in the context I explore: personal, social and collective (Pratt 2003). Personal identities are "idiosyncratic attributes" (Pratt, 2003) such as smart or kind, or more complex assemblages of traits and tendencies such as smart, kind and talented. Social identities, on the other hand, are "that part of the individuals' self which derives from their knowledge of a social group (or groups) together with the value and emotional significance of that membership" (Tajfel 1981: 255). Individuals develop and internalize a social identity based on experiences with social groups or categories. For instance, one might come to consider oneself an activist after taking part in a sit-in or see oneself as a soldier after undergoing basic training. One can even gain a social identity by being labeled as part of a group – an assumption critical to the minimal group paradigm. While personal and social identities are different in that the latter refers to group membership, they are alike in that both are held by the individual.

. Collective identities, by contrast, refer to what members of a collective (e.g., organization, community or profession) feel are central, enduring, and distinctive about that collective (Albert and Whetten 1985; Pratt and Dutton 2000). Collective identities not only exist at a higher level of analysis than social identity, but reside within groups of individuals as "shared" beliefs and meanings (Pratt 2003). As such, individuals are not the vessels of collective identities; collective identities are dimensions of organizations, communities, professions.

Two processes are important in understanding how communities and identities are instantiated. First, identification can be viewed as the process whereby collective identities become transformed into social identities; that is, how individuals come to see themselves as being a part of a collective (Pratt 2003). The process whereby individuals identify with collectives can be managed through socialization practices. Socialization can be seen as a process of inheriting and disseminating norms, customs and ideologies, providing an individual with the skills and habits necessary for participating within his or her own community (e.g., Van Maanen 1973, Pratt 2000). This process often includes the transfer of identity-related information. Importantly, this process can take place through formal, hierarchical channels or via the influence of peers.

Just as identities can be personal or social and influenced by the collective, identifiers or markers of identity – I argue – can be similarly viewed. Identifiers help individuals coordinate tasks, define roles and enforce boundaries through the display of their social identities and signaling of membership in a particular community. Personal identifiers, such as names or pseudonyms, that signify identities are useful in holding individuals legally accountable or in making status claims (Poletta 2004). In most communities, given names are used as personal identifiers, sometimes accompanied or preceded by titles denoting rank or other forms of status within a community. Morris (1986) describes how, in the southern African-American community around the time of the civil rights movement, clergymen held an important place as spiritual and moral compasses for adherents of Baptist and other popular denominations. They were often referred to by their titles (e.g. Reverend) or as "Doctor", independent of whether they received

formal education. I distinguish here between communities where personal identifiers are used and prominent and those that rely on pseudonyms to maintain some form of anonymity. Sissela Bok (1989) describes, for instance, several secret societies (particularly in the 18th and 19th centuries) where pseudonyms were used by participants, enabling members of communities that might not approve of their commitment to these societies to remain members.

In online communities, personal identifiers become more malleable: individuals can adopt new names, and create alternative identities or misrepresent their selves in the physical world. Scholars have suggested that individuals engaged in interactions on the Internet gain the ability to become "disembodied", i.e. they can create alternative identities unbounded by physical constraints, social boundaries (e.g., race, social class). To put it another way, online identities are oftentimes not authentic, but performative; one is what one posts or communicates online, not what one is in reality. Gaming communities (Nardi 1999) encourage the use of creative usernames and the creation of avatars that reflect an alternate identity which is not manifest in the offline world. Personal identifier malleability enables users to experience, if they so wish, virtual worlds as devoid of reputational and status concerns inherent in workplace or school yard interactions. Some users, however, use pseudonyms as a means of creating an alternate self whose contributions and presence are highly valued by fellow contributors to community forums and projects. Over time, users "inhabit" their crafted persona, making them a larger part of their own identity (Nardi 1999).

R searchers also suggest that deindividuation can take place when individuals begin to lose their personal identities (Kiesler and Sproull 1992) and come to see themselves as tools of a collective consciousness. LeBon (1947/1895: 57, as cited in Pratt 2003) suggests that "[t]he individual, in becoming one of the crowd, loses in some degree his self-consciousness, his awareness of himself as a distinct personality, and with it goes something of his consciousness of his specifically personal relations; he becomes to a certain extent depersonalized." Recent research building on the social identity model of

deindividuation (Postmes, Spears and Lea 1998) suggest that deindividuation can cause a shift from personal to social identities as the driving factor for behavior.

If anonymity may be caused by the use of pseudonyms and, if anonymity leads to deindividuation, research would therefore suggest that deindividuation may be very likely in online communities. To illustrate, Sstudies (see Hancock and Dunham 2001 for a review) have suggested that there are few ways to guarantee that individuals use given names or stable pseudonyms as personal identifiers in online interactions. They conclude that this makes the establishment of interpersonal relationships difficult.. These studies, however, do not account for the growing variety of interaction spaces that online communities populate. Many online communities, such as those relying on Facebook as a platform for interaction for instance, are populated by users that use their given names in their posts and when creating online profiles, connect to their families and even make information that might be obscured in face-to-face interaction transparent (e.g., relationship status, age). In addition, few studies focus on how individuals can form a connection with a broad community of users as they begin seeing themselves as, for instance, a *World of Warcraft* player (Nardi 1999) or as a member of a hacker community (Levy 1994). Once users internalize this collective identity as a social identity, it can become a strong motivator for continued contribution to community life, whether online or offline.

Importantly, users involved online communities may exit interactions quickly and often, particularly in situations where there are no stable personal identifiers such as a username or pseudonym that accrue some form of reputation. This reputation, often reflected in statistics displayed to other contributors beside a permanent username, can serve as a means to ensure a user's contribution are of high quantity and quality. The less attached to personal identification and reputation markers, the more likely it is that users will make micro-contributions typical of networked individualism (Wellman et al. 2003). Studies, however, have yet to draw attention to online communities in which personal identifiers are not used. That is, communities in which users contribute anonymously, much like in secret societies, to interactions and to the achievement of goals.

The mere existence of these communities challenges notions that all communities require interpersonal, relationship-based forms of trust. They suggest instead that a generalized sense of trust - the expectation, without suspending critical judgment, that individuals, institutions and things will act in a consistent, honest, reliable and appropriate way (Coleman 1980) - is present. This form of trust allows individuals to participate in a community without fear that community interests will be subsumed by rogue individualism and that their investment in the community will not come at a personal cost. In online communities where members don't use personal identifiers, trust in other community members is not typically based on adherence Gesellschaft-type contracts or, typically, Gemeinschaft type kinship or friendship ties. Instead, users tend to base their trust on the presupposition that members share a commitment to a common purpose and in some cases to a general 'ethic' of liberalism (Norris 2001) that is widespread throughout the Internet. Many of the values and tenets of the free and open source software movement stem from the hacker ethics that originated at MIT and at the Homebrew Computer Club. Hacker ethics were chronicled by Steven Levy in "Hackers: Heroes of the Computer Revolution" (1994) and in other texts. Hackers are concerned primarily with sharing, openness, collaboration and the assertion that information should travel freely. O'Neil (2009:18) emphasizes that the "...primary tenet of the ideology of the Internet is that online networks are privileged sites for the flowering of freedom." Adherence to this tenet is expected among the typically private and sometimes paranoid individuals who self-identify as hackers and avoid the pejorative term "cracker"³. Little research, however, explores whether this ethic-based trust and adherence to these loosely-defined tenets is sufficient to enable the sustained coordination of activities, exchanges and long-term social interaction.

The aforementioned dimensions are instantiated differently in online communities leading to distinctions in how two key processes needed for the organization of these social units take place: (1) the adoption of a collective sense of purpose that guide the actions of a community and (2) the coordination

³ The term cracker refers to an individual that uses technical knowledge of information systems to engage in malicious activities while hackers are simply people with advanced understanding of computers and computer networks.

of purpose-driven actions. The remainder of this chapter delves into these processes, building the theoretical foundation for the empirical work that follows.

Community Purpose and Organization in Transition

Purpose, i.e., the orientation that guides actions and activities undertaken in pursuit of an objective (Rosenblueth, Wiener and Bigelow, 1943), has been central to studies of community. Terms such as 'community of interest', 'community of practice', 'elective community' or 'intentional community' have been used to describe collectives who share a framework of understandings based on a purpose (Wenger 1999, Brown and Duguid 1991). A community of practice, for instance, can take shape because of its members' interest in a particular domain, or it can be created specifically with the goal of advancing knowledge related to a field (Lave and Wenger 1991). Merton's classic notion of a "scientific community" (1968) is often cited in discussions of communities formed with the express purpose of enhancing knowledge about a subject.

A shared sense of purpose that distinguishes a community from entities outside of its boundaries does not emerge out of nowhere, but requires certain enabling conditions and engagement by purposeful actors in its formulation. These actors and the communities in which they are embedded develop distinctive identities and find freedom from dominant norms and restrictions by relying on "free spaces" (Gamson 2000; Poletta 1999; Evans and Boyte 1992) that isolate them from external demands and function as "cultural laboratories" (Melucci 1989: 60), providing the opportunity for development of relationships and ideas. Free spaces are "removed from the direct control of dominant groups, are voluntarily participated in, and generate the cultural challenge that precedes or accompanies political mobilization" (Poletta 1999:1). Putnam (2000, chapter 12) and Brint (2001), among others, speak to the importance of free spaces, advocating the creation of "well-traveled paths and common meeting places" that will provide communities with "opportunities for interaction" (Brint 2001:19). Black churches and
the communities built around them, for instance, which were isolated from the physical and ideological control of white elites in the southern United States, became intellectual hotbeds that gave birth to a "dream" that preceded the more public beginnings of the civil rights movement (Morris 1986). Free spaces provide communities with the opportunity to develop identities based on eccentric characteristics - a testament to the sense of safety, solidarity and freedom from scrutiny and interference of elites or authorities that free spaces offer for populations that might not have it elsewhere. In their study of the contemporary lesbian feminist movement, for example, Taylor and Whittier (1992) show how boundary-setting rituals and the formation of secluded spaces safe from the influence of those in power reinforced internal solidarity and involvement within feminist communities. In short, free space allows communities a safe place where ideas flow, even if these communities are seen as "strangers within the gate" of wider society (Coser 1972).

Studies document "free spaces" and the great diversity of purpose can be observed across community forms that occupy them. These distinguishing purposes can be defined in terms of the core values and the behaviors that set members apart from the dominant culture (Johnson and Snow 1998). While some communities are largely supportive, conforming to expectations imposed by a dominant culture, others oppose prevailing rules and norms. Oppositional communities, much like Yinger's (1984) countercultures, are distinct from a dominant culture both in terms of their core values and in how they behave. For example, student radicals and hippie dropouts both rejected what they believed to be the values of technocracy - a regime of corporate and technological expertise – and behaved in way that signaled their opposition (Roznak 1995). Members of an oppositional community often signal their membership through a distinctive and symbolic use of style (Hebdige 1991) which includes dress, mannerisms, and distinctive speech and writing known as argot. For example, the Punk squatter communities of the late seventies and early eighties that gave rise to bands such as "The Clash" and "The Sex Pistols", dressed, spoke and played their instruments differently than the British establishment they

eschewed. These artifacts and behaviors serve to erect boundaries between these communities and those in the so-called "mainstream".

Scholars have also found the distinction between communities that focus their attention internally and those that focus on external issues. The contrasts are analytically useful in explaining the extent to which communities engage with others outside of their free spaces (e.g., Brint 2001). They focus on the events that prompt community decisions to step outside the bounds of their free space or remain focused on self-referential concerns. On one side of the spectrum, internally-focused communities provide for recreation, social support, or personal and professional development and are, in essence, devoted to their own members, their advancement or the development and sustainability of the community-at-large. Professional associations, for instance, tend to, for the most part, focus on strengthening ties between their members and enabling knowledge and career development (Lave and Wenger 1991). The Academy of Management or the American Medical Association are both formalized professional communities developing a subject area and the professionals involved in its advancement. Merton's "scientific community" (1968) is representative of a less formalized community not strictly bound by rules and regulations. On the other side of the spectrum, externally-focused communities act outside their boundaries, often by expounding a particular worldview or engaging in social action to support or oppose social arrangements. Evangelical denominations tend to be more externally-focused than other protestant denominations because they are driven to express their faith through proselytization and active evangelizing of the gospel. Morris' (1986) rich description of the highly engaged black churches and communities in Jim Crow south during the civil rights struggle also fits a description of an activist community.

Figure 2.1 displays a two-by-two that intersects the two spectra -(1) internally and externally focused and (2) opposing or supportive of the dominant social order– allowing for categorization of communities by level of engagement with and rejection of the status quo stayed by dominant culture. Movement from left to right in the x-axis signals greater discordance with the behaviors and values of the

dominant culture while movement from bottom to top in the y-axis signals greater engagement by a community in activities that seek to engage with the world beyond its boundaries.

Insert Figure 2.1 about here

Importantly, although many cross-sectional studies only capture a community when it has adopted a stable purpose, the purposes associated with each quadrant in Figure 2.1 are not always static. In fact, although purpose may be linked to the community's raison d'etre (i.e., the existential reason for why the community came to be in the first place), it might not remain tied to the origin of the community but be influenced by experiences that change a community's common goals. That is, communities can be formed around common purpose that develops through interaction and, subsequently, change in response to social pressures (Durkheim 1964). As such, many communities are in a constant state of 'becoming' and can be conceived of as highly fluid, dynamic entities. Cohen (1985) argues that communities are, therefore, best approached as systems that are under symbolic construction, coining the term 'communities of meaning'. The reality of community, Cohen argues, lies in its members' perception of belonging and in the resonance of community culture: "People construct community symbolically, making it a resource and repository of meaning and a referent of their identity" (Cohen 1985: 118). Chen's study of the 'Burning Man' community (2009) illustrates the dynamism of community purpose, for instance, by describing how a community that began as a group of friends burning effigies on a beach for recreation became a large-scale, activist community that expounds ideals of free expression and selfsufficiency. Ultimately, she describes the Burning Man Community as an "empowering organization" that is, one in which individuals and the group can pursue multiple forms of professional, emotional and communal satisfaction simultaneously. Comprehensive studies of community transitions such as Chen's, perhaps because of how onerous tracking the development of an entire community can be, are still few and far between.

Most studies focus instead on conducting in-depth examinations of a single transition incited by an easily identifiable trigger event. Social movement and organization theorists recognize, for instance, that the successful transition from being internally-focused – on pursuits such as recreation and social support – to actively seeking out "changes in social norms, behaviors, and ways of thinking" (Staggenborg 1998: 341) (lower right quadrant of Figure 2.1 into the upper right quadrant) requires a resilient sense of collective purpose that musters action and sustains broad-based efforts (McAdam, Tarrow and Tilly 2001) and stable mobilizing structures that give direction to activist passion. These mobilizing structures provide users with a place for assembly and boundaries that define what actions are appropriate and which are beyond the scope of purpose being tackled by the community-at-large (Morris 1986). Johnston (1991) describes how communities immersed in an outlawed Catalan culture and incensed by atrocities, mobilized into a resistance seeking to undermine the authoritarian regime of General Franco. Gould (1991) shows how the uprising against upper classes in the Paris Commune in 1871 was driven, in part, by inequity experienced by oppressed communities populated by the lower classes. These oppressed communities met in union houses and working class establishments across Paris. In his study of the emergence of the civil rights movement, Morris (1986: 4) examines how looselystructured communities tied together by a sense of injustice and local ties placed the black church at "the institutional center" of discourse on equal rights. Although these studies provide compelling snapshots of communities becoming mobilized, they seldom examine communities from their origin, making it difficult to ascertain if transitions are punctuated or occur slowly, over time. Few capture the development of the free space that enables communities to transition into activism by incubating novel ideas and relationships (see Poletta 1999 for full review and critique). Those that do capture communities from their inception tend to treat any transition in purpose experienced by the community as enduring and final rather than temporary. Johnston's (1991) historical study of Catalonia, for example, did not capture how the community transitioned into a position of greater autonomy following the end of Franco's regime and how greater autonomy led to further changes in the socio-political reality experienced by rebels.

Importantly, most of these studies focus on transitions that took place in the sixties or seventies (e.g. Freeman 1973, Morris 1986) or on historical accounts of revolutions (e.g. Gould 1991, Johnston 1991) rather than by new modes of Internet-enabled interactivity and interconnectivity (Earl and Kimport 2011). The Internet has enabled changes to how individuals interact with each other and organize communities, making many of the assumptions guiding organizers in the past less relevant or not relevant at all. It makes interactions necessary for activism less expensive and collective action faster to organize, in addition to producing changes in key dimensions underlying organizing processes; more malleable personal identifiers, permeable boundaries to participation and greater choice in how and when individuals interact (Bimber 2003) all make certain aspects of how online communities are instantiated *qualitatively* different from their historically relevant counterparts. Notably, I argue, these distinctions also inform how online communities experience key processes such as the aforementioned transitions in purpose.

A handful of scholars who have acknowledged the significance of the Internet to collective action, have begun to show how new forms such as online communities and the forums and virtual worlds in which they exist leverage new technologies to enable myriad forms of protest and civic engagement (Earl and Kimport 2011). These studies have not yet investigated, however, how affordances enabled by the Internet have influenced key processes and practices in social movement and organization theory – namely those involved in the transition of a community and its members toward a different common purpose. For instance, Jordan and Taylor (2004) study forms of resistance to neoliberal globalization where participants adopted digital tools and relied on online forums to mobilize members. They do not examine, however, how the communities first became engaged with the cause and mobilized the material resources, mobilizing structures and man-power to tackle it. Bennett and Fielding (1999) have studied how online communities and mobile social media (e.g. text messaging and tweets) have enabled "flash activism", a new form of activism wherein organizers no longer need to cultivate the ongoing allegiance of participants and can instead mobilize in a rapid, low cost ways. Yet, they did not track how users of

flash activism first became interested and engaged in the pursuit of a cause and how that process led to the creative use of these new technologies.

In short, although they comprise the new "building blocks of social movements and revolutions" (McAdam, McCarthy and Zald 1996: 3), we know surprisingly little about how online communities and the users that populate them not only mobilize for activism but become attached to a new, guiding purpose. Although scholars have only begun to describe the differences inherent in online interactions and the possibilities enabled by new tools, we do not understand how online communities challenge theories that have guided how we understand civic engagement and mobilization processes (Earl and Kimport 2011). To address these gaps, I focus the first empirical chapter of this dissertation on illuminating the processes that drive shifts from internally-focused activities to externally-focused collective activism in an online setting. I investigate how an online community experiences multiple shifts in purpose that trigger and sustain the mobilization of actors in different collaborative enterprises (i.e. projects). In doing so, I elaborate on the more expansive research agenda of how entities that are otherwise unengaged in any sort of externally-focused activity come to seek out changes in social norms and behaviors (see Figure 2.1). Work on this research stream has become increasingly important given most collective actors, ranging from protest groups to entrepreneurial ventures, now emerge out of online communities or possess a major online component (The Pew Research Center's Internet & American Life Project 2011). I ask:

Research Question 1:

How do online communities undergo shifts in purpose and how do differently instantiated dimensions of community in online environments influence these transitions?

Coordinating Purposeful Community Action in Online Environments

Coordination, "the process of interaction that integrates a collective set of interdependent tasks" (Okhuysen and Bechky 2009: 463), has been an enduring concern in organization studies (Sinha and Van de Ven 2005) and a central factor enabling sustainable and effective collective action. A well-defined, shared sense of purpose is a necessary, but insufficient component of what constitutes successful organizing (Robbins and Judge 2009). Without coordinated effort, activist communities become a "flailing out against an unjust universe" (McAdam and Scott 2005: 6), unable to deal with unplanned contingencies and uncertainty (Sinha and Van de Ven 2005; Faraj & Xiao 2006).

Early theories of coordination focused on how mechanisms were used to balance differentiation and integration concerns of work organizations (Galbraith 1977, Lawrence and Lorsch 1967, Thompson 1967/2003). The impetus of coordination research at the time was on how managers might handle dependencies between tasks and the workers performing them (Malone and Crowston 1994; Thompson 1967/2003). Following March and Simon (1958), scholars suggested that tasks performed by organizational actors could be coordinated through pre-specified programs (e.g., schedules, strategic plans) or mutual adjustment (e.g., feedback, meetings, informal interaction). Studies of coordination in office work units (Van de Ven et al.1976), hospital emergency departments (Argote 1982), research and development teams (Keller 1994), and accounting audit teams (Gupta et al. 1994) pushed the coordination agenda forward by presenting how variations in task uncertainty and interdependence produce difference outcomes when paired with more or less formal practices supporting coordination.

Recently, scholars have developed a "shared interest in the emergent nature of the process of coordination" (Okhuysen and Bechky 2009: 469) and have worked to define practices that facilitate the arrangement of interdependent tasks, reviving a research stream that had not surfaced in decades (e.g. Galbraith 1973). Instead of focusing on highly structured and static managerial tools emphasized by their predecessors (e.g., Lawrence and Lorsch 1967), these studies have directed attention to practices that "allow individuals to specialize on narrowly defined tasks while contributing to interdependent goals in ways that may be difficult to specify in advance" (Seidel and O'Mahony 2011). By conceptualizing

coordination mechanisms as being embedded in organizing processes and particular cultural contexts, scholars have been able to step away from a focus on transactions and into processes that transcend organizational boundaries and allow for the coordination of increasingly complex and differentiated tasks prevalent in postindustrial society. Faraj and Xiao (2006) demonstrate how trauma centers use dialogic coordination and rely on interaction agreements between team members when standard procedures are insufficient to coordinate work. Bechky and Okhuysen (2011) explain that police SWAT teams rely on a shared paramilitary culture and group training sessions to establish a commonality of perspective necessary for the accomplishment of dangerous tasks. Weick and Roberts (1993) document that high-reliability aircraft carrier teams use "heedful interrelating," a process of linked knowhow and interactions, to enact a "collective mind." Bechky (2006) highlight that in the film industry individuals early in their careers spend time rotating through different departments, allowing them to develop common understandings of the requirements of different roles and how they relate to one another. In Goodman and Leyden's (1991) study of coal mining crews, familiarity among members leads to greater productivity via a series of relational coordination practices.

In a recent review article, Okhuysen and Bechky (2009) enumerate various practices such as plans, rules, roles, routines and boundary objects that facilitate coordinated collective action and produce "integrating conditions" required for both lockstep and loosely coupled task execution: accountability, predictability and common understanding. Based on a review of hundreds of extant studies, they theorize that these integrating conditions must be present for coordinated action to take place in a way that is sustainable and efficient. Yet, even as effort is poured into understanding how coordination efforts seeking to promote integrating conditions takes place in a myriad of organizational forms (Sinha and Van de Ven 2005), little research today addresses how coordination unfolds in in online communities leveraging Internet-based technologies (Earl and Kimport 2011) rather than face-to-face interactions. Moreover, few studies have traced the building of a repertoire of coordinating practices from the formation of *communities*, remaining largely focused on more formalized work organizations. A focus on

brick-and-mortar work organizations has produced interesting theoretical contributions, but has neglected the possibility that examining organizing that takes place in either entirely or largely online might reveal new ways of doing things (Shirky 2008).

Researchers that have examined the effect of technologies on coordination practices focus on groups that engage in intense, face-to-face interactions over long periods of time (e.g. Bechky and Okhuysen 2011) and that often share the same physical space or are socialized through training (e.g. Faraj and Xiao 2006). Mark (2002) explains how NASA engineers spreadsheets to share information across teams working on multiple projects making coordinated effort possible. Teams on naval ships use a variety of technologies, from algorithms to simple logs, to represent navigational problems in ways that make it easier for the cockpit crews to see and understand others' activities (Hutchins 1996). Kellogg et al. (2006, p. 29) describe how differentiated groups in a Web-advertising firm engage in "display practices" in which they post work-in-process online so that everyone can be "kept in the loop" about the progress of the work. Instead, many online communities reject coordination practices that are used in traditional bureaucratic systems and even in the 'flat' organizations of the new service economy. Unlike members of teams engaged in building a stealth bomber (Argyres 1999) or preparing to enter a building for a drug bust (Bechky and Okhuysen 2011) members of online communities might not know each other's names, have access to a common schedule or rely on managers tasked with ensuring that collaborative efforts meet with expectations. In fact, most rely on what Clemens (2005) refers to as "nonauthoritative" forms of coordination that depend on signals from peers or following posts on a Twitter feed.

Because leaders, spokespeople and other formal authority figures help navigate obstacles and provide a legitimate source of common understanding, extant theory has suggested that they ensure a successful coordination of complex coordinated action. Morris and Staggenborg note that leaders "…inspire commitment, mobilize resources, create and recognize opportunities, devise strategies, frame demands, and influence outcomes" (2008: 1). Elsbach and Sutton (1992: 699) note, for instance, that

spokespeople for two radical social movement organizations "shifted attention away from controversial actions and toward socially desirable goals endorsed by broader constituencies", thereby emphasizing the role that leaders can play in allowing groups to pursue a purpose without becoming embroiled in controversy. Studies have also shown that, in the absence of leaders and a stable authority structure, there can be a loss of control over member goals. During the years in which the women's liberation movement was taking shape, emphasis was placed on leaderless, informal "rap" or discussion groups as the central organizational form of the community. As Freeman (1973) points out, these groups had been formed as a reaction against an over-structured society that participants found oppressive and patriarchal. When, however, these groups attempted to engage in specific goals related to advancement of the movement outside of their community, they were faced with the "tyranny of structurelessness" problem, whereby the lack of structure and desire to retain a non-authoritative (Clemens 2005) arrangement they had previously found liberating left them unable to engage in coordination and control (Freeman 1973). The notion that online communities eschew formal, bureaucratic forms of leadership is said to exacerbate these issues, but few studies have examined this phenomenon empirically.

Thus far, we lack even cursory knowledge of how coordination takes place in communities where the exertion of authority and the establishment of trust and norms of reciprocity are made more difficult through the use of pseudonyms, a mixture of synchronous and asynchronous communication over social media or other internet affordances (Earl and Kimport 2011). These communities are able to coordinate large-scale projects of increasing relevance in modern society (O'Mahony and Lakhani 2011, Earl and Kimport 2011), that would, as per extant theory, demand a variety of coordination mechanisms and the development of interpersonal trust between those seeking to accomplish interdependent tasks. In fact, several factors suggest that extant theories may need to be adapted to explain coordination that takes place in online environments (Malone and Crowston 1993). First, the tasks that are being coordinated online are often very different from the tasks that are performed by work organizations in an offline setting, where most coordination theory has been developed. As Faraj and Xiao (2006) explain, traditional coordination theory emphasizes the how (i.e., the mode) of coordination as opposed to the what (content) and when (circumstances) of coordination. But, the nature of the task itself (e.g. one that requires synchronized action by two nameless strangers) might determine the type of coordination mechanism needed for its successful accomplishment. Second, a key construct in coordination theories, interdependence, may need to be re-examined. Pennings (1974) points out that interdependence is a very difficult concept to define, both theoretically and empirically. For Pennings, the concept involves at least four different bases of interconnectedness between unit personnel: task (the flow of work between actors), role (the position of actors engaged in concerted action), social (mutual needs or goals of actors) and knowledge (the differentiated expertise of actors). On the Internet, the identities of actors might be fluid and their roles largely under-determined. Moreover, because the knowledge of actors engaged in collaborative efforts, such as the coding of open source software (O'Mahony and Ferraro 2007), may be unknown the allocation of human resources to particular tasks is often done on a voluntary basis, wherein an individual will volunteer to accomplish a task he or she feels qualified to tackle. Third, contingencies have not been specified in extant theory to deal with concerns over anonymity and the lack of authority structures that are characteristic of many online communities. For instance, extant theory has suggested that trust is crucial to community coordination (Adler 2001), but it is hard to imagine the development of relational forms of trust in online communities where all users are anonymous. As such, many of these studies assume that coordination is achieved through stable sets of interactions occurring in shared physical space or online space.

An understanding of practices that underlie online organizing processes, including coordination, based on not only an understanding of technology but also cultural understanding is crucial to the continued understanding of community-based collective action. Mintzberg (1979: 101) suggests that coordination practices (or, in his words, coordination mechanisms) are "the most basic elements of structure" in organizations, noting that they often depend on tools and technologies that bring key elements together. As these tools change and become incorporated into how social actors structure

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interactions, the nature of coordination changes in kind. Passy and Giugni (2000) argue that a better understanding of "the processes and dynamics that allow movements to make an impact on different aspects of society" is needed; as a fundamental factor in determining outcomes of any type of collective action (Davis, McAdam, Scott and Zald 2005), coordination processes and practices should be included in this research agenda. Malone and Crowston (1994: 87) go so far as to call for "theories about how coordination can occur in diverse kinds of systems." In line with these calls, I ask:

Research Question 2:

How do online communities build a repertoire of coordinating practices that enable coordinated collective action?

3 INTERNET-BASED ETHNOGRAPHIC METHODS

To examine how an online community undergoes transitions in purpose (RQ1) as well as changes to a repertoire of coordinating practices (RQ2), I use an inductive, qualitative approach leveraging Internet-based ethnographic methods (Kozinets 2009). Ethnographic methods writ-large are particularly well-suited to new, emergent, or poorly understood phenomena, since they allow room for unforeseen findings and leeway for researchers seeking understanding through the eyes of a culturally distinct community (Barnes 1996, Hammersley and Atkinson 2007). They involve the painstaking documentation of social interactions among members, including how information is exchanged and examination of how behavior is organized (Spradley and McCurdy 1972)⁴. Both offline and Internet-based forms of ethnography are typically characterized by (1) an immersive, prolonged engagement with the members of

⁴ For more information on ethnographic methods and their importance to theory development please refer to Appendix A ("The Practice of Ethnography").

a culturally distinct community, followed by (2) an attempt to understand and convey their reality through 'thick' descriptions (Denzin and Lincoln 2007).

A pragmatic-interactionist approach based on the recent work by Kozinets (2009) guides this research. Pragmatic-interactionists studying online entities are concerned with how people continually create themselves and their environments through computer-mediated communications. Following this approach, the target of analysis is not the individual but the communications of a community of individuals, which when applied to the online context include both the text contained in postings and other computer mediated content (e.g., images, sounds, etc.). Similar to other interactionist approaches, this ontology considers reality to be socially constructed both purposefully and unintentionally; the building blocks are online interactions which create meaning systems and enrich programmed online environments. Importantly, the pragmatic-interactionist position requires a few assumptions: (1) the online environment is a social world where construction of an online space takes place; (2) this space often has its own norms and rules which are the product of persistent online interaction and design of an online environment; (3) online data are produced as the result of social, communicative acts; (4) these acts should be understood as part of a particular online context which may be more or less divorced from a physical reality and constraints. An analysis which attends to these assumptions does not necessarily seek an authentic identity of who is producing online content because it assumes that the individual communicates what is relevant to sociological analysis (see Kozinets 2009). Consequently, this perspective is considered less useful for researchers seeking to understand how individuals translate their "real world" personas to online contexts or for those attempting to ascertain whether individuals are engaging in some form of subterfuge, but is well-suited to studies of larger aggregations such as communities and their organizing processes (Hine 2000).

Although online ethnography is, at its core, similar epistemologically and ontologically to offline forms, ethnography that is predominantly based on data collected on the Internet must be adapted. The lack of engagement in physical interaction with contributors to a community, for instance, requires a redefinition of what the observance of social interaction entails. That is, although ethnographies are traditionally built on lengthy participant observations involving face-to-face interactions (Hammersly and Atkinson 2007), online ethnographers focus on acts such as image posting, comments on forum threads and emergent computer-mediated relationships that allow for the unobtrusive observance of interaction and ritual. They adapt to the unique contingencies of computer-mediated interactions, which include but are not limited to the use of pseudonyms and alternate selves, the ephemerality of communications (Bernstein et al. 2011), as well as the more obvious physical distance between the researcher and the community members of interest (Ward 2001). In the past, studies of online communities and cultures have been criticized because online communication was considered largely textual and devoid of the social cues which comprise face-to-face interaction. This led critics to question whether online interactions are in fact 'real' (Kendall 2004) or simply theater for the sake of naïve observers. More recently, scholars have argued that, although sometimes qualitatively different, these data are not only sufficient, but are sometimes as rich as data obtained through traditional ethnography, making the writing of thick narratives that extend theory possible (see Langer and Beckmann 2005 for a review). For instance, while a researcher engaging in an ethnography of a physical context is able to perceive gestures, emotional expressions and other social cues that are typically not observable online, ethnographers of online contexts have access to emoticons (a pictorial representation of a facial expression using punctuation marks and letters, usually written to express a person's mood, Walther and D'Addario 2001), posted images, hyperlinks, carefully crafted avatars and other clues that reveal culture (Nardi 1999). Moreover, online methods can lead to the production of fine-grained data from a less location-dependent spectrum of observations, which can be temporally ordered using timestamps, thereby facilitating the longitudinal analysis of interactions and the construction of a narrative.

By examining temporally-bracketed sequences of events made sense of using ethnographic methods, I contextualize action (Langley 1999, Pentland 1999) to the online environment and consider phenomena dynamically – in terms of activity, events, triggers and the ongoing processes within which

these are embedded. Also, by adopting a temporally sensitive, "process orientation" (Langley 1999), I capture community-driven collective action longitudinally rather than provide a partial picture of the world that ignores the role of time (Tsoukas and Hatch 2001) or assume a stable, equilibrium state (Meyer et al., 2005). Finally, by integrating empirical findings and theoretical insights into a narrative over the following empirical chapters (Ch. 4 and 5), I am able to illuminate how patterns of action have been influenced by new means (e.g. practices, tools) and forms (e.g., structures) of organizing without losing sight of context.

Conducting Internet-based Ethnography: From Groundwork to Interpretation

Scholars across various disciplines have developed a set of general protocols and procedures to help regulate fieldwork, data collection, interpretation and analysis as well as the ethics of Internet-based ethnography (e.g. Correll 1995, Kozinets 2009, Ward 2001, Hine 2000, Murthy 2008). I elaborate on steps that constitute a version of Internet-based ethnography inclusive of practices outlined in these highly innovative studies. The specific steps of this method may and should differ depending on the context of a particular study and are, therefore, not meant to be strict rules but simply guidelines amenable to adaptation. Given two research questions are addressed in this dissertation, I am careful to reveal when methods deviate to focus on each question.

Preliminary Groundwork, Site Selection and Sampling. I first became interested in online communities, particularly recreational, prankster communities, after reading about them in blogs about online hacker communities published in specialized outlets (e.g., 2600 and Wired magazine). I believed that these communities would be rich contexts for the study of collective action, which, based on my limited experience at the time, were typically studied using historical methods and focusing on formal organizations designed for social change. I began by making a list of possible research sites (ca. August

2007), visiting sites for several weeks before narrowing my sample. Some sites included those related to cDc ("The Cult of the Dead Cow") and Chaos Computer Club, among others. At the same time, I read streams of research on collective action in online communities as well as on the organization of these actions, particularly pieces in the social movement (e.g. hacktivism, dynamics of contention) and organization theory (e.g. governance and coordination) literatures. I formulated general research questions centered on online communities and their engagement in and coordination of collective action, based on a brief literature review that sensitized me to existing theoretical streams (Corbin and Strauss 2007). These questions were modified and refined as I became more knowledgeable about literature streams and about the context I was studying. By October 2007, I proceeded to identify several online forums, some of which became engaged in collective action and others which remained uninvolved in any form of activism, remaining instead internally-focused on recreation or member development. Preliminary selections were based on mentions in online and traditional publications that reported and cataloged highly active online communities (e.g. Wired magazine, Gawker.com). Following Kozinets (2009) and Ward (2001), the sites chosen for observation had (1) research question relevant content; (2) high "traffic" of postings; (3) large numbers of discrete message posters; (4) detailed or descriptively rich data; and (5) a wide variety of between-member interactions. Over time, 4chan.org (as the initial field site which would expand following this preliminary stage) and Anonymous (the community) emerged as the site that best fit these criteria and that displayed the most detailed discussions of what appeared to be recreational activities (e.g. pranks), leading me to examine their activities in greater detail.

After identifying a comprehensive sample of possible sites (ca. December 2007), I spent approximately 5 weeks (anywhere from 1 to 3 hours per day depending on the level of activity on the sites) following current threads and reading background information on events that had already transpired within the community. I used the browsing strategies described by Canter et al. (1985) to navigate sites and develop a sense of activities that were taking place. These strategies included general *browsing* without seeking out any particular content as a means to become familiar with a broad range of topics

discussed within the community as well as more targeted *searching* for posts that related to discussions of the community's purpose or coordination practices.

After this brief period, I felt assured that the Anonymous community (one of several communities identified at the onset of the study) offered communicative acts that were sophisticated and transparent enough for me to be able to extrapolate a sense of collective purpose and means of coordination by observing forum interactions. In addition, the Anonymous community was newer and more dynamic than more established hacker communities I identified earlier (e.g., cDc). According to Patton (1990), the "logic and power of purposeful sampling lies in selecting information-rich cases ... from which one can learn a great deal about issues of central importance to the purpose of the research..." (p. 169). The Anonymous online community purposefully selected as the site for this dissertation qualified as an "extreme case" (Eisenhardt, 1989; Pettigrew, 1990), where the rich information necessary to examine collective action in an online context was not only transparent and comprehensible but distinct from those offered by any cases I reviewed. Several reasons also made Anonymous appear initially as an appropriate object to study these phenomena. First, at its onset the community populated a site (i.e., 4chan.org) that was freely accessible by anyone, allowing for the study the smallest of interactions as well as large-scale projects and thus providing a broad range of community engagement experiences. Second, Anonymous was focused almost exclusively on recreation at their inception and transitioned into engagement in purposeful collective action, providing me with an opportunity to gather a longitudinal dataset of events and interactions that give insight into why and how the community experienced a shift in purpose (RQ1). Also, Anonymous' reliance on non-bureaucratic or hierarchical means of coordination provides a stark contrast with other forms of collective action, particularly in offline contexts (RQ2). Finally, the culturally rich nature of the community provides a compelling test case for the use of Internet-based ethnographic methods which go beyond simply analyzing the technological content of computer mediated interaction to being inclusive of online culture, technology and design.

Data Collection. Before beginning data collection, I took steps meant to increase my acuity as a researcher and develop a less naïve understanding of the community I was about to study (Hammersley and Atkinson 2007). Through the observation of a rapidly changing and expanding selection of websites that became identified with the Anonymous moniker, I grew more familiar with the target community's norms, values, vocabularies and practices. As I became more comfortable with the online environment and developed a cursory knowledge of norms of the Anonymous community, I began taking field notes of interactions and content I found relevant to my guiding research interests – a common practice in ethnographies (Atkinson 1982). This observation period gave me the tools that would help me distinguish between 'noise' and relevant data and, subsequently, to identify sites where individuals were contributing to conversations about Anonymous. Data relevant to transitions in purpose and the coordination of collective action within the Anonymous community was gathered in various forms (starting in real-time ca. January 2008 and retrospectively for prior years). Much like a traditional ethnographer observing an offline community, I followed what took place in online forums closely, building a deeper understanding of the elements that comprised the Anonymous culture and its meaning systems (Spradley 1979). Observing the Anonymous forums became part of my daily routine for the bulk of the study (January 2008 – February 2011) – I spent at least 10 hours per week surfing websites and researching artifacts such as viral videos, memes, terms and pranks. I adjusted observation time depending on whether events would trigger additional contributions by users. Table 3.1, contains an abridged, representative list of the sites visited during this period.

Insert Table 3.1 about here

I also compiled a detailed list of Anonymous' jargon or argot (Coleman 2011), i.e. an exclusive vocabulary or group of idioms I would need to correctly interpret data (see Appendix B). The construction of this list was crucial to building a taxonomic understanding of how language was

deployed, by which groups, in which sites and in what contexts (Spradley 1979). I also compiled several stories about the inception of the community and connected these to current practices by drawing tables and figures in my field notes (Miles and Huberman 1994). Finally, I constructed a rudimentary timeline of major Anonymous projects (Table 3.2) that would help me put data in context. I edited this timeline over time as I unveiled greater detail about new activities. Relatedly, I collected information on whether the contributors to these projects felt that each project had a successful or failed outcome. Success or failure of a particular project was measured, therefore, by users perceptions often expressed in post-raid debriefing sessions (see Chapter 5 for more information on these practices). Importantly, I was in no way a "participant observer" (Spradley 1979; Geertz 1984) or contributor to activities, choosing instead to "lurk", or passively observe, various forums as I became more familiar with my research context and field site (cf. Langer and Beckmann 2005).

Insert Table 3.2 about here

To supplement and verify my own interpretations of ongoing events and postings and to understand the media environment to which Anonymous was exposed, I searched Lexis-Nexis for articles related to the Anonymous community, 4chan and other Anonymous-frequented sites appearing in traditional news outlets (e.g. national and local newspapers in the U.S. and abroad), web publications (including e-zines and blogs), and on television (by conducting a search of available transcripts). That is, I supplemented emic data (knowledge, interpretations and interactions 'native' of or determined within a particular culture) with contemporaneous etic data (externally generated knowledge about a culture) that were still a part of an Anonymous member's experience (the community was not only aware of these articles but would often create wiki pages that linked to them). False positives that contained references to 'Anonymous' in uppercase or 'anonymous' in lowercase but did not refer to the community were eliminated. Out of a total of 1683 articles, 178 fit the aforementioned sampling criteria. Finally, whenever available, I collected data from Alexa.com – a web information company that collects Internet traffic data and compiles statistics – allowing me to track how the number of unique visitors to Anonymous websites fluctuated over time and aiding in the formulation of informed estimates of when events began and ended. This technique, referred to broadly as a form of temporal bracketing by Langley (1999), allowed to me identify periods that not only captured transitions significant to users but that could be verified with website traffic and news report data. Importantly, while Alexa.com uses Internet Protocol addresses (I.P. addresses) to calculate visits, identification of particular individuals by community users and by researchers by using I.P. addresses remains illegal (without a warrant from the FBI).

Ultimately, three main types of data were recorded: (1) computer-mediated communications of contributors on 4chan and other Anonymous sites identified during my initial engagement with the community (n=1157 threads and chat logs containing at least 10 comments each and n=167 images), (2) field notes inscribed regarding observations of the community and its contributors, interactions, and meanings (n= 46 pages with approximately 200 words per page), (3) etic, media data (n=178 articles split into 798 paragraphs). What emerged, based on the triangulation of forum threads, field notes, media and web traffic data over a 38 month period (January 2008 to February 2011), was a richer picture of events that had taken place throughout several Anonymous campaigns, including a sense of why and how the community became involved in collective action projects and of how each effort was coordinated without bureaucratic structures. When combined with additional retrospective research into the early years of the community (starting in Oct. 2003) using reports from founders, media reports and books released detailing various aspects of Anonymous (e.g. Coleman 2010), I was able to account for about 8 years of community activity. In short, I combine ethnographic data collected in real time with retrospective data (prior to January 2008) to construct a narrative timeline of events focused on narrow research concerns (Pettigrew 1990).

Data Analysis and Interpretation. Many ethnographers, particularly those that adopt a naturalist perspective (e.g., Dyer and Wilkins 1991, Guba and Lincoln 1994), consider the 'thick' description as the main product of research – notably, the aim is often to *understand* phenomena through "vicarious experience" (Lincoln and Guba 1985: 359) rather than to necessarily elaborate theory. I, however, follow the "contextualist" (Langley 1999: 695) perspective by using narrative as a data organization device (Eisenhardt 1989) which allows me to deepen my understanding of how activities, events, actors and context intertwine. I construct an "analytical chronology" (Pettigrew 1990:280) enriched with available data that is meant to balance two goals: to provide a contextualized understanding of a case and to produce theoretical insight (e.g. Van Maanen 1975, Bartunek 1984).

To analyze the large amounts of data generated by several months of observation and research into community activities prior to ethnographic engagement, I used an iterative approach, traveling back and forth between the data, pertinent literature, and emerging theory while developing a narrative. During this process the research questions took shape and were narrowed in scope to fit available data. For instance, the focus on shift in community purpose was the result of multiple re-framings of findings and narrowing of the research question. This iterative approach, which draws on analysis described by Corbin and Strauss (2007), is most often seen in studies that follow a grounded theory approach. Grounded theory analysis offers one method of elaborating theory and of matching constancies that exist in the social world (Miles and Huberman 1994) with data found through observation. In fact, the iterative construction of theory using a grounded theory approach is highly compatible with an ethnographic approach to data collection. Ethnographic studies can provide the thick description that is very useful data for grounded theory analysis (Glaser and Strauss 1967). Part of this compatibility derives from similarities between the two methods. Ethnography entails observing and analyzing behavior in naturally occurring conditions. Grounded theory similarly performs best with data generated in natural settings. Both are often guided by interactionist perspectives (though not exclusively, Langley 1999), and both often rely on observations of social interaction. Sample selection is emergent in both ethnography and

grounded theory and both attempt to obtain emic descriptions of behavior (Barnes 1996), although grounded theory analyses often incorporates etic data sources.

Importantly, although I adopt the grounded theory framework for my analysis, I was sensitive to techniques proposed by Spradley (1979) which help shed light on Anonymous as an entity embedded in a distinct culture. For instance, I was sensitive to how Anonymous' cultural domain (e.g. online community within the troll culture), with its distinct taxonomy (e.g. hacker argot deployed by contributors, technical language used to coordinate raids) and components (e.g. contributors, sites, objects, and activities) impact the discovery or purpose and the coordination of collective action. These relationships are revealed through my presentation of the narratives in the empirical chapters.

To parse the content obtained during data collection, I used a qualitative software package (NVIVO, 2008). Whenever possible, sources were time-coded (i.e. put into chronological order using time-stamps) based on when the content was posted, allowing me to examine how events transpired in chronological order and to establish distinct periods in which events ensued and concluded. Each time-coded string was also coded to reflect its original source; for instance, data taken from video-sharing sites were coded "v". As meaning emerged from the data, tentative themes were explored and reworked iteratively. Since I use the data to construct narratives for different empirical chapters, the content extracted for coding from NVIVO differed significantly based on the topic at hand. Similar to Pratt, Rockmann and Kaufmann (2006), the analysis of this content consisted of three major steps, repeated for each empirical chapter below, as well as an additional step which define periods for the presentation of a narrative. Figures 3.2 and 3.3 provide a partial overview of the coding structures for each empirical chapter to help illustrate how the analysis transitioned from open coding to theoretical coding of transitions in purpose and the adoption of a repertoire of coordination practices.

Insert Figure 3.1 and Figure 3.2 about here

Step 1: Preliminary coding and creation of provisional categories. After coding for both empirical chapters was complete, I parsed the data by assigning content that related to changes in purpose into one node and data that referred to coordination practices into another. I began coding by assigning the data to provisional categories that were constructed as the collection progressed using a procedure akin to open coding (Corbin and Strauss 2007). Media articles were juxtaposed with comments from the Internet-based sources and my own field notes to corroborate events and supply additional support for the coding scheme. I would often return to the raw data in search of additional data to support promising threads or that I mentioned in field notes but did not notice in the postings data. Each category included in the analysis was, therefore, supported by at least one coded source or, whenever viable, by multiple sources. In essence, I "triangulated" (Denzin 2006) multiple data sources to ensure coherence and to eliminate common data source biases. The final product of this step included several first-order codes such as statements of purpose by forum users or events and artifacts that signaled purpose for the first empirical chapter and attempts at coordinating tasks and statements related to organizing activities for the second empirical chapter.

Step 2: Integrating first-order Codes and creating Theoretical Categories. In this step, I consolidated first order codes into abstract categories so that they would reflect a more parsimonious and theoretical representation of the data, moving thusly from open to axial coding (Corbin and Strauss 2007). After each code had been assigned to a theoretical category, the categories and underlying codes were reviewed again to determine if they were coherent and if they fit the coding scheme. For the empirical chapter focused on describing how Anonymous experienced transitions in purpose, for instance, I focused on comments, news reports and field notes that described why users joined particular Anonymous projects as well as the content of discussions reacting to challenges by antagonists and supporters with which disagreements arise. I assigned first-order codes to particular purposes, to events that triggered transitions in purpose, and other provisional categories that would help establish process (Langley 1999). This time-stamped and revised data was then integrated with web traffic data from Alexa.com to ensure

that I accurately noted spikes in activity and shifts in sites where activity was taking place. When analyzing data for the piece on coordination, I focused on both on real-time data of project coordination as well as retrospective accounts of how attacks on websites and street protests transpired. Mentions of practices that related to the accomplishment of specific tasks, the planning of projects, raids or protests were also assigned to provisional categories denoting explicit coordination practices (e.g. use of boundary objects, creation of knowledge bases). Importantly, much of the data collected that did not fit into these research interests were set aside, revealing a clearer picture of Anonymous activities and behaviors. Once the data collection was completed, I reviewed the categories to verify if they related back to the research question and reflected the meaning of the collected data accurately.

Step 3: Connecting to Aggregate Theoretical Dimensions. In this step, revised theoretical categories were compared across time and with each other to see if they fit together into a comprehensive, narrative. I reviewed literatures that inform a discussion of emerging themes, attempting to relate themes to available theories and constructs (Corbin and Strauss 2007) and moving iteratively from theory to data to narrative composition. For my exploration of the community's transition from recreation to purposeful collective action. I attend more closely to emergent codes that revealed the process of mobilization and engagement in collective action. These include, for instance, comments regarding fluctuations in contributions to Anonymous sites or planning of calls for participation. I focused on collective action models and dynamics of contention mostly derived from the social movement literature as well as descriptions of communities from across sociology and community studies (e.g. Brint 2001). I also found the growing literature on online community organizing to be particularly useful to helping me build a sequence of how purpose shifted over time. The literature review also revealed several gaps that could be addressed using the data collected in this study. Extant conceptualizations of community purpose, for instance, were largely static, not taking into account how communities change and adapt over time. The chapter on coordination required a review of coordination mechanisms theorized in traditional bureaucratic organizations as well as a focus on papers that examine coordination in non-traditional contexts, particularly those that are information technology intensive (Okhuysen and Becky 2009). The use of particular "representations" (Seidel and O'Mahony 2013), e.g. virtual worlds or IRC channels, to coordinate particular modes of action were informative. I was able to add to theory by not only showing how coordination practices developed without traditional forms of leadership portrayed in extant leadership, but by tracking repertoire development longitudinally.

Step 4: Periodization and Process Model Creation. In my analysis I attended to occurrences that signaled shifts in community purpose (i.e., what was guiding their actions) and the means through which that purpose was executed (i.e., what practices were deployed). Periods were, as such, determined and delimited through the identification of changes in purpose, revealed through comments in online forums and my own field note observations. Changes in the means of executing a new purpose would follow statements of purpose, signaling implementation of the change. I identified four periods punctuated changes in purpose and means: (1) A period (Oct. 2003-Dec. 2007) characterized by recreational pranksterism and practices that enabled the execution of pranks, where formation of the online community took place (2) a brief hacktivist period (Jan. 2008) characterized by hacker attacks on a single target for reasons that were both externally focused on engendering social change and recreational, (3) a de-radicalization period (Feb. 2008-May 2009) in which most contributors adopted traditional protest tactics, developed coordinating practices to support this type of social action, and (4) a reconstitution period (Jun. 2009-Feb.2011) characterized by the introduction of a new platform for participation in multiple projects that required and enabled the introduction of new supporting practices. As I explain in more detail within the empirical chapters, several events triggered these changes producing what Coleman (2010) called "the changing faces of Anonymous" (p.ixvv). Trigger events ranged from the creation of a new interaction space (Period 1), to reactions to community actions by external observers communicating in the media or communicating through the media (Period 3), and events perceived as trangessive of core Anonymous values such as free expression or data sharing on the Internet (Period 2 and Period 4, respectively).

For Chapter 4, time-coded second order categories were arranged chronologically, allowing for the identification of enabling conditions, trigger events and drivers of a process (Langley 1999). In doing so, I develop an explanation of a sequence of events over time by telling a story about how and why a phenomenon evolved as a result of the temporal ordering and probabilistic interaction of numerous events (Mohr, 1982).

Cyber-ethics. Because of the distinctive environment and expectations of users of online forums most online ethnographies emphasize the importance of taking steps to ensure the protection of individuals under study. My most pressing priority was to ensure that the contributors to Anonymous sites whose interactions provided me with a unique source of qualitative data were protected, both in terms of their personal safety as well as the integrity of their community. While the interactions observed were publicly available and *legally* not of concern, I follow the lead of other ethnographers of online sites with publicly available content (Kozinets 2009, Ward 2001) by discussing how I resolved *ethical* concerns relevant to this context.

My first concern was whether to reveal my presence to users in Anonymous websites. Unlike in traditional ethnographies or in web contexts where not only presence but identifying information must be revealed for observation to be possible, the Anonymous network of websites lacked personal identifiers (see Chapter 2 for information on personal identifiers). This made it possible for me to observe real-time social interaction without revealing my presence. In preliminary groundwork, I found that self-identification would have been highly counter-normative in this setting where anonymity is held as a core value and any form of "netiquette" is treated with disdain. I elected, therefore, to follow the example of ethnographers in consumer research into sensitive subjects and remain anonymous, engaging in passive observation of postings and chat rooms (Langer and Beckmann 2005, Kozinets 2009). As Spradley (1979) notes, this is an acceptable stance, particularly for ethnographers that do not wish to disturb the rituals, norms and culture of the individuals under observation. On a related note, the level of perceived

privacy within the community was not a concern because the community's interactions were open to observers by design; the websites didn't offer privacy protections and made sure that no such barriers to interaction were possible. In fact, there was a persistent, reasonable and widespread expectation on the part of forum contributors that their communicative acts were being observed by unnamed third parties. Ultimately, this "lurker" stance proved to be advantageous, allowing me to make my forays into the community forums as unobtrusive as possible; so much so, in fact, that I can claim to have had no influence on how interactions transpired and to have assuaged the observer effect that concerns many naturalists (Lincoln and Guba 1985).

Another concern stemmed from whether or not I should engage in participant observation, i.e. becoming actively involved in the activities of the community and engaging in my own communicative acts. Given the borderline legality of many Anonymous actions, I elected to remain a passive observer collecting data that was legally obtainable and publicly available. I also felt that participation in the community would make the interactions less reflective of the community's 'natural' state (Denzin and Lincoln 2006).

The involvement of Anonymous in potentially illegal activities brought up another concern: Were I to be compelled by authorities to discuss my findings, would I have any information that would incriminate members of the community? In this case, the lack of personal identifiers, which were never revealed even to members of the community, made it so I could never identify the particular users performing a particular act. Therefore, although I could describe events that transpired, I could not identify which individuals perpetrated communicative acts that could be deemed illegal.

4 SHIFTING PURPOSE: ANONYMOUS' ENGAGEMENT IN ACTIVISM

How do online communities undergo shifts in purpose and how do differently instantiated dimensions of community in online environments influence these transitions? In this chapter, I reveal the

process behind how the Anonymous online community is transformed from a small gathering of users reveling in pranksterism to a community of thousands of users connected through a novel platform for civic participation. As the process model outlined in Figure 4.1 reveals, transitions from a internally-focused oppositional community to several iterations take place over four periods. In addition, the figure reports on trigger events that mark transitions between periods and the enabling conditions that support these changes. Table 4.1 supports the process figure by showing how each dimension of online community changes over the periods. Changes in spaces populated by the community, the nature of interactions between users and with external others, the boundaries that constrained users, and how users deployed personal identifiers and understood their collective identity all inform the process.

Insert Figure 4.1 here Insert Table 4.1 here

In the first period, a highly permissive free space is created and populated by active users, providing enabling conditions for recreational pranksterism and the formation of an oppositional community where experimentation with an emerging repertoire of new tools and tactics takes place. In the second period, the then purely recreational community experiences becomes aware of censorship of online content by the Church of Scientology that offends users that have internalized free expression values in the previous period. Users then mobilize and engage in hacktivism, i.e., the use of legal and/or illegal digital tools in pursuit of political ends, targeting the Church of Scientology. In the third period, prompted by negative feedback from individuals in the media or those speaking through media and influenced by the influx of risk-averse newcomers into community interaction spaces Anonymous experiences de-radicalization - wherein the community adopts traditional protest tactics and grows more inclusive of broader constituencies. In a fourth period, following a schism and demobilization of anti-Scientology efforts and a new action perceived as going counter to internalized community values,

Anonymous adopts a project support platform which allows for the simultaneous incubation and support of diverse projects and co-existence of traditional and hacktivist protest.

In the following sections, I describe what transpired in each of these periods in an "analytical chronology" (Pettigrew 1990:280) enriched with available data that is meant to balance two goals: to provide a contextualized understanding of a case and to produce theoretical insight. It attends to how sensitizing constructs influence the transitions in purpose experienced by Anonymous.

Period 1 (Oct. 2003 – Dec. 2007): Forming an oppositional community focused on recreational pranksterism

In October 2003, 15-year-old Christopher Poole (known by the pseudonym 'moot') created a series of imageboards - Internet forums that revolve around the posting of images and related comments - intended for the exchange of content by fans of Japanese animation. Poole had become frustrated with existing forums that did not allow users the freedom to behave as they wished and that required identifying information from users prior to participation. He named⁵ the network "4chan". According to Shii, a coder and forum moderator in the early days of 4chan, it took several false starts, changes made to site programming, and avoidance of attempts by competing user communities (e.g. 'Something Awful') to sabotage the board, for 4chan to gather a large following of users (est. in the thousands by 2004, www.shii.org). The design of the 4chan imageboards provided users with several affordances that were either not permitted or not made available in other online interaction spaces. Some of these affordances were intentionally provided by Poole and others were exploited by users due to programming oversights (Poole, 2010).

Because of several unusual enabling conditions afforded by the site's programming, 4chan soon became known for being a fast-paced environment, permissive of lewd and illegal content which would normally trigger ejection in mainstream forums. Poole programmed a unique space that contained various

⁵ 4chan was inspired by similar discussion boards (e.g. Futaba channel) and by Poole's interactions with users in a forum named "Anime Done The Right Way" (ADTRW).

features users found useful and distinctive. First, 4chan allowed users to post images and messages without registering a username or creating permanent accounts. This feature ensured that contributors remained completely anonymous, unassociated with persistent, personal identifiers displayed to fellow users. Anonymity was therefore in place independent of whether they were new visitors or had been posting in forums for a long time. A second feature of the 4chan imageboards was the 'ephemerality' (Bernstein et al. 2011) of its user-generated content. Posted comments and images remained viewable by users for a short period of time - some for no more than a few hours - and were not archived in a central server. This feature allowed postings to be posted and subsequently deleted in the server at a very fast pace. Only the content that resonated with active users, those willing to re-post or comment on submissions, endured for a long enough time to diffuse through the community (Sorgatz 2009). These two first features were encoded into the template of the 4chan site by Christopher Poole and became reproduced over time. Third, moderators would not ban users (identified through I.P. addresses, not a username) from the site, except in instances where they were found to be "spamming" the site (i.e., posting unsolicited bulk messages, especially advertising, indiscriminately). Founder Christopher Poole (2010) remarked that "when the community was still getting started all we did was maintain the site and try to keep spammers out."

Users seeking a platform for interaction with as few restrictions on posting behaviors as possible began to gather on the "/b" imageboard - 4chan's most popular and most controversial board, capturing over a third of all the traffic within the 4chan network (Poole 2010). Although interactions in other 4chan boards remained relatively tame, those within the "/b" imageboard were characterized by "rapid-fire conditions [that] magnify the need for audacious, unusual, gross, or funny content" (Coleman 2011). Not only was the exchange of pornographic images, lewd jokes and purposefully offensive and often racist or misogynistic content tolerated by moderators within /b, it was encouraged by fellow contributors. /b became infamous for the ways in which users entertained themselves and observers through: (1) the production of a broad range of "memes", i.e., entertaining artifacts that are propagated across the Internet

and that sometimes make their way outside of 4chan and into the mainstream Internet (e.g., Lolcats, Rickrolling); (2) the exchange of various forms of pornography and gruesome photographs; and (3) the conduct of a series of "raids" or hacker-style attacks of online targets. Over time, these raids and many of the memes were attributed to a community of unnamed contributors to /b who claimed the label of "Anonymous" or the shorthand "Anon." In short, bolstered by anonymity and moderator tolerance, /b became a distinctive interaction space where behaviors that were against the law, enforced in other imageboards, were celebrated. Importantly, however, excluding the occasional raid on unsuspecting targets, contributors to /b did not interact with external others. Instead they chose to remain relatively secluded (see lower right quadrant in Figure 2.1) during this period.

The characteristic lack of technical and normative boundaries regarding vulgar and occasional unlawful posts (e.g., child pornography) did not mean that the community existed in a normative vacuum. Intentional defiance of political correctness and engagement in pranks, pervasive practices within /b, are characteristic of what is often referred to as "troll" culture. Trolling can be narrowly defined as the posting of inflammatory, extraneous, or off-topic messages in an online venue with the primary intent of provoking user response and causing general disruption. More broadly, the term can refer to acts that reveal disdain for rules and constraints on deviant behavior. In Encyclopedia Dramatica (http://encyclopediadramatica.ch), a public catalog of content produced in forums like 4chan, a Troll is described in lurid detail characteristic of the community:

"A Troll is more than the embodiment of the internet hate machine, trolls are the ultimate antihero, trolls fuck shit up. Trolls exist to fuck with people, they fuck with people on every level, from their deepest held beliefs, to the trivial. They do this for many reasons, from boredom, to making people think, but most do it for the lulz." (attributed to Mastertroll, undated)

As the quotation above suggests, trolls often take action for amusement's sake; they do it for the "Lulz". Coleman (2011) describes the Lulz as the "motivating emotional force and consequence of an act of trolling" and as "a linguistic spectacle—one clearly meant to shock and offend...." A troll's emphasis on freedom of self-expression and information evokes the cyber-libertarian worldview described by Norris (2001) and others (see Coleman and Golub 2008 for a review). The pranks and hoaxes perpetrated

by the community drew on something akin to a "hacker ethic" (Levy 1994) centered on the idea that all information, no matter how offensive or disturbing, should be freely available. Like Yinger's (1982: 94) counterculture that existed in "communal and utopian withdrawal in search of ecstasy and mystical insight" self-proclaimed members of this community sought a place where they could express themselves freely and have fun, even if that fun, in line with the troll code, came at someone else's expense.

By 2007, after several years of interactions reinforced troll norms within /b, the community was immersed in pranksterism. Raids, pranks and the exchange of lewd comments and memes were not only commonplace, but the central activity of users contributing to /b and several other 4chan forums. As Figure 4.2 indicates, the majority of posts in late 2007 centered on the seeking of "Lulz" and included reports of pranks, calls for raids of other forums and even memes celebrating successful pranks and raids. Variety in both techniques and targets increased as each original poster (or "OP") suggested new and creative ways to generate entertainment for a growing community. These pranks and forum interactions made no mention of advancing a single agenda. Instead, Anonymous contributors focused on a raid until they became bored; they would then turn their attention to whatever topic captured their interest and generated "Lulz". To illustrate, among the earliest pranks conducted by 4chan posters were repeated raids of Habbo Hotel, a social networking site designed as a virtual hotel. The first raid (ca. June 2006) was triggered by the news of an Alabama amusement park banning a two-year-old toddler affected by AIDS from entering the park's swimming pool. Following a suggested course of action by a contributor to the imageboard, users signed up to the Habbo site dressed in avatars of a black man wearing a grey suit and an Afro hairstyle. They then blocked entry to the virtual hotel pool, declaring that it was closed due to AIDS. Habbo was quickly flooded with memes created in the 4chan imageboards and with users mockingly arranging their avatars in swastika-like formations. When the raiders were banned, they flooded the customer support section of the site with complaints of racism. Comments in Anonymous forums after the conclusion of the raid focused on the Lulz obtained and not on any serious discussion of racism – any users that took offense were accused of self-righteousness and deemed, in the argot of the community, "moral fags".

Insert Figure 4.2 here

Comments which sought to bring serious consequences or issues to the attention of users quickly became the subject of ridicule. Calls for attacks on Facebook profiles, hacks of ex-girlfriend computers and other personal requests by posters were often met with a resounding "NYPA". Urbandictionary.com defines states that NYPA as an acronym for 'Not Your Personal Army'". Essentially, users attempted to communicate to posters of those requests that Anonymous wasn't a resource to use for personal vendettas"⁶ but a playground where rules were bent and broken as long as they led to laughs. So, although the media repeatedly reasserted the notion that 4chan and Anonymous didn't respect boundaries of any sort, the community's avoidance of seriousness and hacks driven by personal gripes became habitually enforced normative constraints.

By setting these norms for behavior and creating local idioms and vocabulary, Anonymous contributors collectively enforced symbolic boundaries within which a sense of community and a distinctive collective identity could be developed. Anonymous forums were spaces where contributors experimented with new ideas and modes of behavior. Displays of playfulness and pranksterism, for instance, were not only rampant but, more importantly, indicative of a burgeoning value system, the centerpiece of which was the pursuit of fun. Freedom of self-expression also became a pervasive component of the new "Anonymous" community. Raids perpetrated for the Lulz soon became rationalized as celebrations of a free Internet and the hallmark of a "prankster" (Coleman 2010) collective identity where built on bucking conventional behavior. In short, a sense of purpose "emerged", not

⁶ <u>http://knowyourmeme.com/memes/x-is-not-your-personal-army#fn1</u>

through the guidance of formal leaders, but through ongoing interactions and dialogue within the 4chan free space. In Figure 4.1, I refer to this purpose as recreational pranksterism.

Period Summary: Between October 2003 and December 2007, triggered by frustration with existing forums that did not allow users the freedom to behave as they wished, 4chan was conceived as an interaction space unfettered by personal identifiers, characterized by highly ephemeral interactions and with loose moderation – in essence, a playground with no supervision. These conditions attracted users seeking a "free space" where the exchange of taboo content and actions provided a unique source of entertainment (i.e., Lulz). Eventually, norms drawing on cyber-libertarian ideals of free expression and troll disdain for authority, local argot and a rich repertoire of prank, raid and hacking tactics and techniques developed. Symbolic boundaries were adhered to and celebrated by contributors, allowing for the development of a community of highly individualistic, anti-authoritarian users that sought novel forms of "unrepressed" social interaction and setting the enabling conditions for periods that followed. Ultimately, the most salient dimension for this period was location, in the form of the programmed "free space" of 4chan. It allowed the community to form a prankster identity, free from the tethers of personal identifiers and couched in the safety and freedom anonymity provided.

Period 2 (Jan. 2008): Mobilizing for externally-focused hacktivism

In January of 2008, a video of Tom Cruise discussing his beliefs as a Scientologist was posted to multiple online video-sharing sites. Gawker.com (2008) claimed that the video had been "passed around privately by reporters and writers investigating Cruise's ties with Scientology" but that "most reporters [had] been wary of taking on the Scientologists, because they have a history of both litigation, and harassment of critics."⁷ Attorneys representing the Church of Scientology claimed the video was produced solely for internal use and threatened legal action against websites that carried it. The threats caused some sites, but not all, to remove the video and related content. These legal threats were

⁷ <u>http://gawker.com/5002269/the-cruise-indoctrination-video-scientology-tried-to-suppress.</u> Accessed January 28, 2008

immediately noted and interpreted by contributors to Anonymous forums as an affront to a shared conviction that had grown increasingly prominent in forum discussions (see Figure 4.2), i.e., that information, no matter how offensive or independent of ownership by a private party, should flow freely.

Discussions of current affairs and other serious issues were atypical for Anons but, compelled by the Church of Scientology's actions, users became engaged in exchanges about free speech, information distribution and self-expression on the Internet. Several users suggested that the actions of the Church of Scientology provided a timely opportunity for generating Lulz at a much more ambitious scale (users referred to these as "epic Lulz"). Discussions of "Lulz" in this period became focused on how much fun it could be to attack an organization as mysterious and restrictive on member behavior as the Church of Scientology. One Anon commented that the Church of Scientology was finally "an opponent worthy of our skill" (/b forum, January 2008). Others suggested that the Church of Scientology was a "perfect nemesis", an embodied antithesis to Anonymous values. Ultimately, the event prompted the initiation of an unconventional, large-scale experiment in organizing that diverged from business as usual for Anonymous. It would also mark the first time that Anonymous became engaged in an initiative that sought to address a perceived injustice instead of solely providing recreation. Contributors to the "/b" forum wrote:

"I think it's time for /b/ to do something big. ... I'm talking about "hacking" or "taking down" the official Scientology website. It's time to use our resources to do something we believe is right. It's time to do something big ... Talk amongst one another, find a better place to plan it, and then carry out what can and must be done. It's time, /b/" (4chan /b forum)

"Gentlemen, this is what I have been waiting for. This is a battle for justice. Every time niggertits has gone to war it has been for our own causes. Now, gentlemen, we are going to fight for something that is right. I say damn those of us who advise against this fight. I say damn those of us who say this is foolish. /b/rothers, our time has come for us to rise as not only heroes of the Internet, but as its Guardians. /b/rothers. Let the demons of the Intarwebs become the angels that shall vanquish the evil that dare turn its face to us. /b/rothers... man the harpoons!" (4chan /b forum)

Anons attending to interactions within the /b forum quickly planned an ambitious nuisance campaign called Project Chanology. They began by producing and distributing a video call to arms and warning to the Church of Scientology:

"Hello, Leaders of Scientology. We are Anonymous. Over the years, we have been watching you. Your campaigns of misinformation; your suppression of dissent; your litigious nature, all of these things have caught our eve. With the leakage of your latest propaganda video into mainstream circulation, the extent of your malign influence over those who have come to trust you as their leaders, has been made clear to us. Anonymous has therefore decided that your organization should be destroyed. ... we shall proceed to expel you from the Internet and systematically dismantle the Church of Scientology in its present form. We recognize you as serious opponents, and do not expect our campaign to be completed in a short time. However, you will not prevail forever against the angry masses of the body politic. Your choice of methods, your hypocrisy, and the general artlessness of your organization have sounded its death knell. We are Anonymous. We are legion. We do not forgive. We do not forget. Expect us." ⁸

In addition to releasing the call to arms video, Anonymous contributors began posting about the topic in several other imageboards: 711chan.org, the partyvan.info wiki, Futaba and numerous Internet Relay Chat (IRC) channels. The decision by users to ask for the assistance of other forums was highly counter-normative: since the community's founding in 2003, users had been weary of interacting with users of other forums and valued the notion that they had created a unique space of their own. The allure of the "epic lulz" that could come of this campaign against the Church of Scientology, however, led users to relent, transgress normative boundaries and work to ensure the broad-based mobilization of supportive parties that were not in the original /b forum core:

So you want to join Project Chanology eh? Fight the good fight for the Internet? Or perhaps you are a skeptic, doubtful we can do anything? I won't lie to you. I am an /i/nsurgent first, a /b/tard second, and an allaround Anonymous, but I know that for a fight against the Beast it will take more then possible even every chan combined could muster. We might be rivals; hell, we might hate each other's guts, but this goes beyond just us. ... When things happen to Scientology, like that South Park episode or Tom Cruise going insane on Oprah's show, Scientology loses lots of credential. We need to finish that off, or leave it open for the major media to deliver the coup-de-grace.⁹

Anons deployed tactics from a repertoire developed in the smaller scale raids and pranks of Period 1. They unleashed distributed denial of service (DDoS) and Gigaloader¹⁰ attacks on Scientology.org (and other Scientology sites), i.e. swamping web providers with access requests and making sites inaccessible to visitors. The initiative was successful in blocking access to Church of Scientology websites

⁸ Message to Scientology, January 21, 2008; <u>http://www.youtube.com/watch?v=JCbKv9yiLiQ</u>. Accessed January 22, 2008

⁹ Project Chanology Wiki. http://encyclopediadramatica.com/PROJECT CHANOLOGY, accessed August 4,

¹⁰ Gigaloader, an Internet-based tool that is now offline, was one of many tools used by Anonymous to overwhelm Scientology servers at the early stages of the conflict. It works by loading and reloading website images. thereby taking up massive amounts of bandwidth. The legitimate use for the tool is to stress-test servers.
sporadically from January 18, 2008 until approximately January 25, 2008. They also blocked other Church of Scientology means of communication by "black faxing", i.e. overwhelming Scientology office fax machines with dark pages, and annoying Scientologists by calling in fake pizza orders to and requesting taxi pickups at offices and centers. As the spike in numbers of unique visitors to Anonymous sites in late January 2008 indicates (Figure 4.3), the severity of the attacks and level of participation in them had been unprecedented and would provide the community with bragging rights and the Lulz they sought; they would also provide contributors with a sense that they had addressed an injustice. To mobilize the number of users required for this project, however, Anons had created calls that appealed to a broad range of users and deviated from the lulz-centric motives that sustained community involvement. New users, with distinct motives and little experience with hacking, would soon enter Anon forums in droves.

Insert Figure 4.3 here

Wiki pages and static websites (instead of rapid-fire forums typically associated with 4chan) were created, containing information for those wishing to become familiar with and possibly take part in Anonymous' Project Chanology. These signaled (1) a change in typical Anonymous norms of requiring individuals to "lurk" in forums to absorb information, rather than offering detailed explanations of ongoing projects to newcomers, and (2) reflected a new openness in sharing what Anonymous was and how it functioned with broader audiences. Many of the symbolic boundaries, including the use of certain argot and the demand that users "lurk" in the imageboard before contributing which had been developed in the early days of the community were relaxed not by formal consensus or choice, but because the same features that made it difficult to control behavior in the forums (e.g. anonymity, ephemerality, lack of moderation) also made it difficult to enforce Anonymous norms that flourished in the first period. This loss of control is reflected in one user's comment suggesting that "we are not the close band of /brothers that created Anon, we are mutating into something that we have lost control over. Paging Dr.

Frankenstein" (4chan /b, Jan. 2008). Moreover, Anonymous had no formal leadership structure at the time that could push the community to adopt a practice or retain a normative stance. Statements justifying the importance of the initiative in other forums cited both a concern with free speech and pointed to the possibility of "epic lulz", appeals which resonated with existing members of Anonymous and with newcomers. As Figure 4.2 shows, in addition to Lulz and free speech, new threads concerned with human rights and the treatment of adherents to Scientology by church official began to appear, many initiated by individuals that would have no qualms about revealing their names and posting links to their personal websites. Importantly, the community's discussions of lulz-centric activities and of lulz more generally began to decline considerably. Instead, hacktivism-centered discussions filled the forums on 4chan, reflecting a new hacktivist collective identity that was still unconventional but had become externally focused (Figure 2.1) and less centered on recreation. Ultimately, users slowly began to migrate from the /b forum to other interaction platforms, creating a more heterogeneous interaction environment that bred different behavioral norms and greater community dispersion.

Period Summary: A belief in the free flow of information, as well as a disdain for censorship, emerged through ephemeral interactions and continued contributions to the Anonymous community. These notions and the symbolic boundaries erected as they became internalized led contributors to consider the removal of proprietary video by the Church of Scientology as an affront to the community, leading to a rapid mobilization of existing users, and unprecedented calls to other communities outside of 4chan. A repertoire of hacktivist techniques built in Period 1was deployed against the Church of Scientology. Videos, wikis and other media that described the Anonymous community were created by contributors seeking to explain Anonymous to the media and to any newcomers to the community. As symbolic boundaries to conversations in the forums. The argot that had permeated the imageboards and made 4chan a distinctive space was quickly being displaced by standard English. Moreover, by the end of January 2008, topics discussed in Anonymous forums reflected diverse interests and began to

displace discussions of lulz-related exploits and lulz-seeking exchanges that previously dominated community interactions (Figure 4.2). As Figure 4.1 reveals, the interactions between users and communities they rallied as well as the defense of symbolic boundaries drove the adoption of free expression hacktivism as a shared purpose for the Anonymous community. Ultimately, the prankster collective identity that had taken shape over years of raids was extended to include a less recreation-centered hacktivist identity.

Period 3 (Feb. 2008 – May 2009): De-radicalizing and de-mobilizing with the adoption of audience-engendered traditional activism

News soon spread of Anonymous' exploits to various audiences including other critics of the Church of Scientology and media outlets. Their attacks on the Scientology websites became known to parties who weren't attending to 4chan threads or exposed to Anonymous calls to action in Period 2. By February of 2008, long-time critics of the CoS – those who had been protesting the practices of the Church decades before attacks of the sort deployed by Anonymous were even possible - made their opinions of the recent attacks heard. Mark Bunker, a prominent figure among long-time critics, suggested that although the efforts of Anonymous were exciting and had been helpful in mobilizing a large cadre of supporters, several mistakes were going to "hurt the effort in the long run." He suggested that Anons lobby congressmen to rescind Scientology's tax exempt status, organize protests and hand out flyers, call up local radio stations and, in essence, employ more traditional, legal and peaceful tactics. Other critics of the Church of Scientology followed suit, issuing similar statements. Andreas Heldal-Lund, founder of a well-known website called Operation Clambake, issued a statement declaring that "...attacking Scientology like that will just make them play the religious persecution card. They will use it to defend their own counter actions when they try to shatter criticism and crush critics without mercy." These negative audience evaluations marked the first major interaction between Anonymous and the long-time Church of Scientology critics. Although both essentially agreed that the Church of Scientology should be dismantled, they disagreed on what means were most effective to achieve it. The legitimacy of

Anonymous' tactics was fundamentally questioned not by antagonists, who did not yet publicly recognize Anonymous as a threat, but by potential allies who argued against their sustainability and ethics.

In addition to capturing the attention of Church of Scientology critics, the attacks also drew in mainstream media observers. Figure 4.3 shows that prior to the attacks in January, the media showed little interest in Anonymous – occasional reports in specialty blogs noted that an unknown actor was using online community forum to engage in pranks. Attention spiked, however, when it was discovered that the perpetrators of the attacks on the Church of Scientology used particularly unusual methods. A short mention by The Economist compared the tactics employed by Anonymous to "cyberwarfare techniques normally associated with extortionists, spies and terrorists."¹¹ At the same time, they likened Anonymous' tactics to the Church of Scientology's self-described "fair game" tactics that it had employed against its critics.¹² Although Anonymous comments expressed hope that the media would attend to and support Project Chanology, most pundits seemed more interested in deciphering what Anonymous was than in what they had to say. Anonymous' means were useful in obtaining attention, however, their tactics directed focus towards the community itself and not the message the community was trying to impart. A video released by Anonymous on youtube.com called attention to this fact:

"Dear News Organizations. We have been watching your reporting of Anonymous' Conflict with The Church of Scientology. As you said, the so-called Church of Scientology has actively misused copyright, and trademark law, in pursuit of its own agenda. They attempt, not only to subvert free speech, but to recklessly pervert justice to silence those who speak out against them...We find it interesting that you did not mention these objections in your news reporting...." (http://www.youtube.com/watch?v=pcr1trjtLaU)

These audience evaluations resonated with many Anons, particularly the under-socialized newcomers that had just begun to participate in community activities. In the absence of formal leaders to interpret input from supporters, allies, antagonists and the media, users were free to interpret comments on their own and suggest responses: even though some wanted to continue hacker-style attacks, others

¹¹ Staff (Feb. 31, 2008). "Fair game: An online onslaught against Scientology". The Economist (The Economist Newspaper Limited).

¹² The term *fair game* describes various aggressive policies and practices allegedly carried out by the Church of Scientology against those its leadership perceives as its enemies

suggested alternative tactics and acknowledged the possibility that supporters provided a more viable course of action. Discussion over whether Anonymous should shift tactics to something more palatable to mainstream media and long-time anti-scientology protesters became heated; frenzied comments, dissent and extreme proposals prevailed as ideas that being offered that drew on hacker tactics grew increasingly tempered by the comments of newcomers hesitant to engage in illegal acts as well by those persuaded by critics' advice. The stalemate was resolved after many hours as exhausted and frustrated users consented to trying something different. The following is a post hoc summary provided by one of the wikis:

"At first, WBM (wise beard man) distanced himself from Anon, and was wary to directly help, out of fear that the Scilons would sic their extensive team of legal professionals on his ass again. Nonetheless, Anonymous took the advice he offered about peaceful protesting seriously, and helped ensure the subsequent successes ... By successfully convincing Anon to change its strategy, Beardfag, in essence, managed to do the impossible: control the essence of chaos on the Intarwebs."¹³

Eventually, a call was issued on youtube.com and distributed between forums for new tactics to fight the war against Scientology. The call was not, however, acknowledged by users who believed in the effectiveness of hacktivist tactics. They reacted to what they perceived as an attempt to capitulate community values, claiming that new members had "corrupted" or "polluted" their efforts. One comment stated that "these newfags are ruining what we had here...it really isn't the same since the boy scouts moved in." (7chan, March 2008). Meanwhile, new members entered the forums in droves and posted lengthy introductions and declarations of commitment to the destruction of the Church of Scientology. These comments were greeted with crass responses such as "lurk moar fag" (4chan, March 2008) or with references to those that referred to mission and the importance of Project Chanology as "moralfags" (4chan, March 2008).

Challenges were also posted on the boards that dared users to solve puzzles that required more than cursory knowledge of computers and coding - knowledge which many newcomers did not possess.¹⁴ Those who failed to overcome these technical barriers had their posts disregarded by established users. Importantly, users posing these puzzles to newcomers sought to re-establish the symbolic boundaries that

¹³ Project Chanology, http://encyclopediadramatica.com/PROJECT_CHANOLOGY, accessed August 8, 2008

¹⁴ http://knowyourmeme.com/memes/newfags-cant-triforce. Accessed December 12, 2009.

had been upended. A media observer noted that "the publicity drew hordes who wanted to participate, and soon many longtime Anonymous users found themselves annoyed with the new converts who thought Anonymous was a crusading organization."¹⁵ Another Anon stated:

"Am I here for the lulz? Oh, fuck yeah. Without /b/, you don't get the spectacle, and without the spectacle, nobody cares. These poor guys, Arnie [Lerma] and Mark Bunker and those guys, they've been doing it for years, but without the spectacle, nobody pays attention. You wouldn't have any fun. That's what /b/'s brought--it's brought some youth, it's brought some energy."¹⁶

The efforts of those attempting to return Anonymous to its hacktivist beginnings made little difference. Calls for Lulz were drowned out by cries for greater involvement in anti-scientology protests. Figure 4.2 support this assertion – note that by August of 2008, the "Lulz" were being less discussed than both free speech and other less prominent activism-related topics. Comments began to signal acquiescence to the wishes of external audiences (e.g. Scientology critics and the mainstream media) and to take seriously the possibility of engaging in "IRL" (In-Real-Life) protests. In fact, by mid-March of 2008, calls for offline protests dominated the imageboards, culminating in the release of a video urging Anonymous members and allies to protest in front of Church of Scientology centers all over the world. In the video, a computerized voice stated:

"It has come to the attention of Anonymous that there are a number of you out there who do not clearly understand what we are or why we have undertaken our present course of action. Contrary to the assumptions of the media, Anonymous is not simply "a group of super hackers". Anonymous is a collective of individuals united by awareness that someone must do the right thing... We want you to know about the gross human rights violations committed by this cult.... We want you to know about all of these things that have been swept under the rug for far too long. The information is out there. It is yours for the taking. Arm yourself with knowledge... Anonymous invites you to take up the banner of free speech, of human rights, of family and freedom. Join us in protest outside of Scientology centers worldwide." (http://www.youtube.com/watch?v=YrkchXCzY70)

¹⁵ Singel, Ryan. 2008. War Breaks Out Between Hackers and Scientology — There Can Be Only One. Threat Level. <u>http://www.wired.com/threatlevel/2008/01/anonymous-attac/</u>.

¹⁶ Landers, Chris. 2008. Serious Business Anonymous Takes On Scientology (and Doesn't Afraid of Anything). http://www2.citypaper.com/columns/story.asp?id=15543. Accessed November 8, 2008.

Radar online reported that over 7,000 protestors gathered in front of Scientology centers throughout the world¹⁷ for the first protest. Many of the protestors wore masks to retain the anonymity they enjoyed in online forums and to protect themselves from CoS retaliation, in essence translating a portion of the culture they had developed online into the physical world. In addition to donning masks, protestors sang songs and carried signs that drew attention to CoS practices. Following the success of the offline protests, new demonstrations were quickly planned and executed, each highlighting one aspect of Scientology's current or past practices and Anonymous' critiques against these practices. Many high profile defections from Scientology bolstered the efforts and led to increased commitment by many to traditional tactics.

With each additional protest, however, excitement seemed to dwindle in the online forums (see decreasing visitation on Figure 4.3 following the spike in early 2008). Many contributors, including many of the newcomers who had been initially attracted by the novelty and spectacle of Anonymous, found themselves bored with protests that had become "more routine than my day job" (Operation Clambake Forum) or "just like one of my parent's protests but without the sex" (4chan /b forum). As more protests were staged, the community found itself increasingly divided.

As Anonymous adopted more traditional, legal protest tactics and accommodated newcomer interests, Scientology critics released a series of videos expressing their support for Project Chanology. Concurrently, the few reports that still attended to the community in them mainstream media (see Figure 4.4) began labeling Anonymous as a social movement organization. Even though they received expressions of support from media, contributors to early Anonymous efforts grew increasingly disheartened by a community they "didn't even recognize anymore" (4chan.org/b). Users noted that outsiders had led Anonymous toward conformity to traditional social movement tactics and that Anonymous was on its way to becoming increasingly formalized. Many publicly withdrew their support

¹⁷ Cook, John (March 17, 2008). "Scientology - Cult Friction: After an embarrassing string of high-profile defections and leaked videos, Scientology is under attack from a faceless cabal of online activists. Has America's most controversial religion finally met its match?". Radar Online (Radar Magazine). Accessed March 30, 2008.

for the Project Chanology, citing that "the chans have been taken over by newfags and they don't bring the lulz." (4chan, /b forum). Offline protests that had been so successful in preceding months began drawing smaller crowds. Forum members remarked that "if nobody is watching, why are we doing this...wasn't the point of this thing to create awareness, influence people or whatever?" (IRC chat). Although the hacker attacks had been innovative, the protests were commonplace and as such, were not covered as events by the mainstream media. To many participants, street protests signaled moves away from the spectacular tactics that had brought about Project Chanology's success, triggering boredom and apathy. Operation PSA (public servant accountability) is an example of this trend:

"Therefore, we begin Operation: PSA (Public Servant Accountability). This is a public phone, letter, and petition campaign informing these representatives of our disapproval as citizens and tax payers for their failure to act in the interest of public safety against a known and convicted threat to the public.... The plan of attack is to inform the public and emphasize that these are paid federal public servants in support of the continuation of a dangerous, federally and internationally convicted cult, and who are against the idea of regulatory agency to protect the public against dangerous cults. This is unacceptable of public servants and they must be held accountable." ¹⁸

From this point onward many of the contributors to Project Chanology that were part of the old guard had already moved on to engage in other pranks. They claimed to have no interest in participating in Project Chanology and to devoting their attention to new, albeit smaller-scale, projects. In January 2009, for instance, Anonymous targeted McKay Hatch, a teenager who ran the No Cussing Club, an anti-profanity website, leaking her personal information online – which subsequently led to obscene phone calls and pornographic magazine and video deliveries. Along the same vein, on May 20, 2009, members of Anonymous uploaded pornographic videos onto YouTube tagging them with names that attracted the attention of young children. They had, in effect, returned to the underground, where they could seek out Lulz without any of the difficulties involved in putting together larger projects. Those in Anonymous dedicated to seeing Project Chanology through, continued employing traditional social movement tactics such as street protests and sit-ins.

¹⁸ Operation PSA, forums.whyweprotest.net.

Period Summary: The third period was characterized by acquiescence to the admonitions of external audiences and eventual adoption of more traditional, offline protest tactics. Without formal leaders, guardianship of a recreational sense of purpose became untenable, particularly as external audiences intervened and newcomers entered became part of the community. Because means to distinguish members from non-members were limited to argot and the use of puzzles and technical boundaries were not in place, re-establishing symbolic boundaries to protect the integrity of the community's focus on Lulz also became increasingly challenging. In essence, following calls for support and all the changes that ensued, a dominant majority of Anonymous contributors, the most vocal of whom were newcomers and embraced a traditional activist identity, transitioned away from being focused on online hacks of sites motivated by a search for "Lulz" and a disdain for censorship. Instead, they engaged in traditional protests under the banner of human rights, family protection and cult abuse prevention. The traditional tactics were not sufficiently remarkable or spectacular to sustain the attention and commitment of the community, leading to widespread demobilization and exodus from community forums in the spring and early summer of 2009 (Figure 4.3).

Period 4 (Jun. 2009 – Feb. 2011): Reconstituting community through a pluralistic relational platform

It took several months before new claims of Anonymous engagement in illicit activities were seen again. Campaigns that garnered media attention were few, far between, and had limited impact on forum attendance. In June 2009, for instance, nearly a year after the demobilization of large anti-Scientology street protests, prompted by requests from Iranian nationals and the programmers behind the file-sharing site Pirate Bay, a handful of Anonymous contributors decided to support efforts of the Iranian Green Movement trying to remove restrictions to their Internet connections. Soon thereafter, Australian Anons declared the beginning of Operation Digeridie, an attack on Australian government sites that were attempting to censor Internet content. Although these international projects were small, they signaled a tentative re-engagement by some contributors in activism, countering a move toward more recreational pursuits observed by the end of Period 3. Importantly, users engaged in these small projects began experimenting with new, increasingly sophisticated tools as they attacked new targets and engaging directly with users in other countries, inciting the internationalization of the community's user base.

In September 2010, an incident lit the powder keg of this more sophisticated and internationalized Anonymous. An Indian security company hired by movie studios to protect online content from piracy launched a denial of service attack against The Pirate Bay, the most prominent illegal file-sharing website on the Internet. Incensed by the attack and seeking retribution, Anonymous contributors finally called for a large-scale remobilization of the community using 4chan and many other sites where many Anonymous users that had become disenchanted with activism still gathered:

"Aiplex, the bastard hired gun that DDoS'd TPB (The Pirate Bay) needs to be put down! Rejoice, /b/rothers, the time has come for resurrection and for us to blow the shit out of those basterdz with our massive lasers." (4chan /b, June 2009)

Figure 4.3 shows a spike in both forum visitation and media reports about Anonymous beginning in late August and early September of 2010 related to this new shock. As Figure 4.2 shows, the percentage of threads about Lulz and free speech, i.e. the topics that made Anonymous famous internationally, slowly begin to rise again in this period as well. Importantly, as IRC (Internet Relay chat) networks were used by small groups (e.g. Marblecake) to pull off complex pranks and hacks, the new version of Anonymous which emerged following the decline in contributions after Project Chanology leveraged IRC networks much more extensively. Instead of using third party servers that were vulnerable to attack, Anons began relying on networks they owned and run themselves, many of which were provided through interconnected international servers. Although over 65% of threads appeared in image boards and other asynchronous communication forums before the decline of contributions to project Chanology, only 43% of threads collected in Period 4 took place outside of IRC networks.

IRC networks (e.g. Anonet and Anonops) became central to every aspect of Anonymous operations. Within each IRC network, scores of channels were created, although there were only a dozen or so that were populated at a given time. Each channel represented aspects of a larger project (e.g. logistics, media relations), so users who entered the network could select which project they wished to contribute to and which aspect of the project might benefit the most from their expertise. Some channels were devoted, much like the imageboards, to social topics and exchanges. Other channels existed to address technical issues and as a form of support system for new users or users with questions. Finally, there were multiple channels where the many political operations are coordinated.

This new platform served several purposes: (1) it allowed Anonymous to pursue several projects simultaneously and better filter the expertise of members, allowing users to assign themselves to tasks in which they exceled; (2) IRC networks required slightly more technical know-how and effort to access than 4chan imageboards, meaning users that weren't willing to take the extra time to understand how IRC networks function were defacto excluded from Anonymous. As such, a boundary for participation which excluded users that were unwilling to learn was erected; (3) the ability to see how popular certain topics were over others within the network – through the use of visitation indicators and counters - meant Anons began to gain a better understanding of which topics appealed to the community as a whole and which were niche topics sustained by a limited number of passionate users. Altogether, these features allowed Anons to time calls for new projects to match with lulls in other project offerings, ensuring that active users always had something available to which they could contribute their time. An Anonymous user contributing to a tutorial forum set up for newcomers to Anonymous suggested that "the new networks are able to better serve and understand Anons. Instead of being forced to participate in a raid you don't give a shit about, go nuts at a vegas style buffet of ops…" (Anonnet, December 2010).

It was only following the release of state department communications on Wikileaks by Julian Assange and others in late 2010, however that participation swelled to near Project Chanology levels once again (see Figure 4.3). Following the arrest of Assange and the withdrawal of donation support to Wikileaks from several companies, Anonymous decided to punish MasterCard, Visa, PayPal and others using LOIC (Low Orbit Ion Cannon) software and other "Denial of Service" tools. Unlike previous projects, Anonymous took on a support role, allowing Wikileaks to take the spotlight. Whyweprotest, one of the few remaining forums for Anonymous contributors outside of the IRC networks, contained several posts explaining that Anonymous could play a *new* role in the Wikileaks scandal:

"I think we are doing the right thing here. Assange is a douche but the mission is good. We should support it without making him look dirtier than he already is. The credit card companies are the real bitches here cause now he's got no defense fund." (Dec. 2010, Whyweprotest, Operation Payback forum)

"We should play a support role. Anon is back with a thousand different masked faces and a primo network. Know what I mean? We can be the quarterback or we can be the ninja in your fucking wall fucking with the creditcard numbers." (Dec. 2010, Whyweprotest, Operation Payback forum)

Attacks on the credit card companies that withdrew their support for donations to the Wikileaks foundation ensued and attracted new attention to Anonymous. These attacks led to the arrest of several Anonymous contributors, but also to PayPal supporting donations to Wikileaks. The arrests did not deter continued attacks on behalf of Wikileaks as well as efforts to raise awareness of content in the State Department documents leaked via the site (named Operation Leakspin). Concurrent with the Wikileaks efforts, Anonymous became engaged in the Arab Spring revolts through attacks on the Tunisian and Egyptian governments, both of which were coordinated with hackers in those countries who had joined the community months earlier.

The notion that Anonymous contributors were willing to take on multiple projects at the same time reflects more than an expansion of collective identity to encompass pranksters, hackers and activists. It marks what one user referred to as "a maturing of Anonymous" which wasn't only necessary for the community to avoid self-destructive conflicts but "made it so Anons saw themselves as part of something bigger than a single op but as keepers of a gathering where all are welcome" (Anonnet, Jan. 2011). Another user remarked, in response, that "Anonymous is not about calling people out on shit, it's a place where you go do get your lulz…and that is none of my business…it is what you want it to be." (Anonnet, Jan. 2011).

Period Summary: In this fourth period, Anonymous reconstituted itself after a third party attacked a file-sharing website used by Anonymous members. Users perceived the attack as an affront to the values of free information exchange that had become internalized by the community in Period 1. The community shifted from being involved in a single cause (i.e., Project Chanology), which had lost most of its support, to using its channels to incubate several projects and provide support for initiatives such as Wikileaks and the Arab Spring. Instead of defining itself in opposition to the Church of Scientology, users began to consider Project Chanology as one of many ongoing projects. As Figure 4.2 shows, several types of discussions became part of discourse within Anonymous: the Lulz, free speech, human rights, class struggles, etc. These discussions were made possible because of the adoption of a new interaction space (i.e., multi-channel Internet Relay Chat) and the use of Anonymous-run servers that enabled the deployment of the new online environment. Because of the low costs of maintaining an IRC network and because it allows contributors to coordinate and easily make small contributions to multiple projects that interest them nearly simultaneously, the use of this single network for multiple projects engendered sustained website traffic and allowed for a diversity of interests within the community. Individuals no longer rallied around a single, particular cause but came to see themselves as contributors to a community where the norm became to be simultaneously engaged in multiple projects. The purpose of Anonymous, therefore, was no longer to be purely recreational, serve one cause or another, but to be the platform for many interests and causes. This platform would allow those seeking recreation to coexist with those more interested in activism and enabled the inclusion of users that adopted a prankster, hacker, activist or any other identity, attenuating conflict.

Discussion

Scholars have shown that a shared purpose is essential to the mobilization of social actors and sustained engagement in activism. The transitions experienced by inwardly focused communities as they become engaged in activism is said to require resources, steady leadership (Morris and Staggenborg 2008) and the use of protest tactics that are palatable to the media and other key audiences (Gamson

1992). The case studies upon which these findings are based tend, however, to be historical and precede the changes to key dimensions of organizing that have been made possible by the Internet. Studies that do focus on Internet-based collective action have not examined how online forms transition into activism or, consequently, how the affordances of an online environment impact this process. I answer calls for researchers to re-conceptualize the processes that lead to movement formation (McCammon 2001) for a world that relies increasingly on the Internet for civic engagement, going beyond showing that "adaptation to the environment may …require changes in goals and in the internal arrangement" (Zald and Ash, 1966, p. 328) of a community to illustrating how and why particular steps in the transition process took place in a novel and underexplored context.

I reveal how theory built on historical cases fails to capture Anononymous journey from an inwardly-focused community to one that seeks social change through various means. I find that these shifts in purpose were possible, without the use of personal identifiers, with permeable boundaries for membership and other features seen as essential to the proper function of collective actors. These distinctions produced a starkly different cycle from the oft reported mobilization, protest, demobilization around a single issue (McAdam, Tarrow and Tilly 2001). Instead, I found that Anonymous predictably mobilized and demobilized, but by leveraging Internet-based platforms for communication, reconstituted itself as a platform where multiple causes could be attended to and tackled through micro-contributions. I discuss these findings in two sections that address the research question proposed in the beginning of the chapter: (1) Anonymous's transitions in purpose into its current form as a platform for multiple issues and (2) how the online environment influenced this process and enabled the continued existence of the community in various forms.

Online Community Transition into Activism

Historical case studies of large-scale community-based movements suggest that the process by which communities become involved in activism follows a relatively predictable pattern of mobilization, protest, demobilization, with each phase initiated by exogenous or endogenous triggers. A trigger (Jasper and Poulsen 1995) incites actors to seek to address an injustice by seeking "changes in social norms, behaviors, and ways of thinking among a public that extends beyond movement constituents or beneficiaries" (Staggenborg 1998: 341). Under the guidance of leaders or spokespeople, dispersed actors mobilize, gathering resources and forming organizations that provide coordination structures for their efforts and define boundaries between members and non-members (Morris 1986; Morris and Staggenborg 2008). Those selected as members organize protests and attempt to grow support for their cause among key audiences, collecting donations that can lend further legitimacy to their efforts. These formal organizations continue to advance a particular cause until the issue is addressed or there is a loss of interest from key constituencies. Once interest abates, members of these formal organizations disperse and the whole cycle of mobilization, resource gathering and organizing is repeated when support for a new cause is rallied. Thus far, people have resorted to founding stable, formal organizations dedicated and designed around a single cause to curb the cycle of resource mobilization, demobilization and avoid the costs of re-mobilization.

The Anonymous community deviates from this general pattern in several ways. As Figure 4.1 demonstrates, triggers were still crucial to marshaling support within forums for a large-scale project. Contributors, however, never sought resources or created formal mobilizing structures to support activities, with the exception of the formation of IRC networks in the fourth period. Instead, ideas for projects were suggested in open forums and planned in chat rooms by individuals using no personal identifiers at little cost outside of these contributors' time. Even though some Anonymous contributors went on to create more formalized organizations following Project Chanology street protests, the majority of Anonymous contributors who remained in the forums never selected leaders or spokespeople, defined formal boundaries between members and non-members or collected donations, behaviors which are associated with traditional protest groups.

Whereas most communities that become involved in activism become formalized (Zald and Ash 1966) and tend to become social movement organizations, Anonymous settled for a different form of organizing to allow individuals to participate in what Poletta (1999) referred to as an "endless" cycle of protest. Unlike formal organizations that disperse once interest in a cause abates, Anonymous remains active, with an unremitting inflow and outflow of projects. Importantly, this negates the need for a whole new group of social actors to be mobilized every time a new cause musters attention. Attention within the community is paid, therefore, not to full-scale re-mobilization and movement formation (see Tilly 1978), but to the maintenance of systems that support continuous activism. As Figure 4.1 illustrates, instead of focusing on championing a single cause and becoming isomorphic with traditional community-driven efforts, Anonymous became an incubation and support system for multiple cause that were active simultaneously. It became a platform for participation rather than an activist group focused on a single cause. Many of the projects that are found in Anonymous boards are protests against some form of censorship; although the sites also serve as a platform and aggregator for projects or recreational activities worldwide. Instead of following a process of mobilization, protest and demobilization, the community is conceived, efforts are mobilized, demobilization occurs, but inexpensive *reconstitution* is made possible through technology and the support of a unique set of community values.

The transition into a new form was enabled not only by the affordances of the online environment (discussed below) but also because a lack of formal leadership allowed the group to engage in continuous exploration of how to organize rather than being guided to conform to a particular modus operandi. Media and critics of Scientology influenced the direction of Anonymous when it was focused on undermining the Church of Scientology; however, Anonymous developed a new purpose that enables the community to accommodate both "hacktivism",traditional protest and the original recreational purpose of the community under a single virtual roof. As such, similar to architects that embraced modernism as a "big tent", the online environment created conditions in which pluralism was embraced to resolve and prevent future conflict (Jones et al. 2011).

The Influence of the Online Environment

The shifts in purpose experienced by Anonymous were different from those experienced by traditional incipient forms that become engaged in activism, largely due to a different transition process (Figure 4.1) driven by differently instantiated dimensions of community (Table 4.1) in an online environment. Below, I offer an overview of how these dimensions led to different dynamics, causing a more rapid cycle of protest to transpire and enabling continued protest rather than complete demobilization. I note that in every period some dimensions of community became more salient, determining or enabling the transitions in purpose that are the focus of this chapter.

Locations. Although location has been historically dominant in many definitions of community (e.g. Block 2009), the findings reveal that the relationship of the Anonymous community with location was not as straightforward as defining a community as offline or online, location-bound or free from concerns related to physical space (similar to Agre 1999). Importantly, the online environment is not devoid of locations in that different websites, channels and forums are considered as distinguishable spaces with different rules for interaction (Rheingold 2000); to an Anonymous contributor this, as opposed to a geographic location, is "where" activities take place. Spaces, in this case, are not devoid of things, meanings and values (Gieryn 2000), but contain virtual representations or simulacra of reality programmed into existence through software code and housed in hardware (i.e., memory). Similarly, targets for raids are spaces (e.g. Habbo Hotel) where individuals are bound by virtual space programmed by third parties. They are, in other words, imagined spaces that exist in an online environment and which constrain and enable behavior.

So, although many conceive of the Internet as a tool used instrumentally to accomplish tasks, I found the forums and channels that define the experience of participating in a raid or being a contributor

to Anonymous to be transformative "space" that can become as taken for granted as a park or a sidewalk. Software such as browsers and chat rooms make this space coherent for visitors by providing cues that reveal what is possible and impossible (Gibson 1984). The freedom to develop a unique culture (Melucci 1989), including unique artifacts, ideas and values, was a function of the creation of online spaces (e.g., 4chan, Anonnet, Anonops). Because they were malleable and could be reprogrammed to suit changing needs of the community, secure in that they allowed for anonymity and the use of argot, and playful because they lacked a predefined structure, requiring the imagination of users, Anons adopted and modified 'space'. Similar to lesbian cafes (Correll 1995) and church basements of the civil rights movement (Morris 1986), the Anonymous community sites, forums, wikis, and chat rooms, even if imagined and programmed online, became integral to every transition experienced by Anonymous and remained at the core of how Anons behaved when in their community.

That is not to say that physical location, in the traditional sense, played no role in the Anonymous experience. When Anonymous became engaged in physical protests, for instance, contributors founded local sites (e.g. Boston Anon) to support the distribution of pamphlets and to allow users to quickly identify updated information regarding protests and local restrictions on public protest (Period 3). The community was split in their decision to support physical protests, influencing the schism that would precipitate the upcoming period. International users, concerned with events taking place in their own countries, also played a role in reviving Anonymous after the demobilization of Project Chanology (Period 4). International users participated asynchronously in discussions or took over tasks from users engaged in projects in complimentary time zones. They reacted to issues important to their particular geographic location and worked to gain the support of contributors worldwide by putting those issues in broader context. The Australian elections, for instance, were framed by Australian contributors to Anonymous as important in the worldwide fight against Internet censorship because one of the candidates favored bans on file-sharing sites and strict enforcement of media piracy laws. These projects captured the attention of U.S. based users no longer interested in attacking the Church of Scientology, sparking a new

wave of experiments that led to the eventual establishment of Anonops and Anonnet, the two IRC networks that overtook the forums in popularity.

Transitions in purpose, were therefore, influenced by the limitations and affordances of the online environment. I contribute to extant conceptualizations of location and the use of space in community mobilization by highlighting how the creative use of programmable, online spaces became a defining characteristic of Anonymous – one which played into how the community developed a sense of purpose. So, whereas Gieryn (2000), Brint (2001) and other theorists focus on geographic location as a stable place that influences community, I note that in online environments, spaces remain influential, but are now malleable. As such, the imprint of the founding space (e.g., 4chan) and the programmers that design it (e.g., Christopher Poole) continue to be salient and relevant to the community, even when it becomes dispersed. In fact, Anonymous always remained linked and influenced by the /b forum on 4chan, even as it grew more sophisticated. The issues, constraints and enabling features of physical locations, however, were also influential – providing triggers for action, new sources of manpower and creativity. Location was, however, most salient when new "spaces" were adopted by the community in Period 1 and in Period 4. Each time a new space was conceived of and adopted new moves became possible and others were constrained as if, to use a crude metaphor, users migrated from backgammon to a chess board.

Boundaries. Many boundaries that characterize the spaces in which Anonymous contributors discussed topics and organized themselves had influence on how Anonymous shifted purpose. In particular, I found that two form of symbolic boundaries – normative and linguistic – as well as technical boundaries (e.g., ease of access to platforms) were particularly salient to the community as it experienced transitions in purpose. After the creation of the 4chan imageboards loose moderation and a lack of normative boundaries restricting behavior (with exception of the use of proper names) enabled experimentation with different forms of recreation, including creation of fun graphics and engagement in pranks. The creation of argot within the community as a linguistic boundary to examination by potential antagonists unfamiliar

with the community, such as law enforcement, enabled Anonymous to engage in hacktivist activities (e.g., Distributed denial of service attacks) without being prosecuted. This sense of isolation allowed for the experimentation characteristic of "free spaces" (Poletta 1999) seen in, for instance, the civil rights movement (Morris 1986). Eventually, the existence of this free space enabled the transition from simple pranks to the use of illegal tactics that went beyond nuisance to genuinely damage websites and create havoc for targets (Period 2). At a time when the community was small and relatively exclusive, it was able to cause significant damage to the CoS sites through the use of hacker-style tactics and small-scale coordination of efforts through chat rooms and the forum itself. As Anonymous cultivated media attention, however, its ranks swelled quickly with under-socialized members that brought with them different priorities and behavioral constraints (Period 3). Although argot was still present in the imageboards, the sheer numbers of new contributors simply overwhelmed existing norms – discussions took place in plain English and only the occasional post in argot would surface. Given this influx, Anonymous was unable to maintain their focus on freedom of speech on the Internet, uncompromising pursuit of "lulz" and use of hacker-style tactics that, according to posted comments, made participation compelling for the 4channers that initiated Project Chanology. These were also key elements that made the Anonymous community oppositional, differentiating it from the mainstream. When this difference became subsumed by incoming members bent on conformity, the ethos of the community, which made them appealing to contributors, was displaced. This finding reflects the suggestion by Meyer and Lupo (2007) and Ryan (1991), among others, that oppositional communities such as Anonymous face a paradox: either they conform to externally set standards for normalcy and give up their counter-cultural identities, or they retain their identities and doom themselves to ineffectiveness.

Eventually, (i.e., with the introduction of the new interaction space in Period 4), however, Anonymous became more accepting of plurality, redefining its purpose to allow for the influx of new contributors. This was made possible through the use of forums where multiple projects could be coordinated simultaneously and through the effort of contributors who recognized that Anonymous could be more than a "single cause" community. As Zald and Ash (1966) point out, it is unusual for communities to become more accepting of new agendas or to have multiple agendas simultaneously. Typically, boundaries become more restrictive, membership better defined and a clear sense of purpose is outlined by an established leadership. In the case of Anonymous, boundaries to entry by new users and changes in direction or purpose remained possible – albeit more technically challenging - even as the community gained a better sense of what its role could be in the civic sphere. Importantly, the community was able to retain the feeling of an unsupervised playground where anyone can play. As it grew, however, the community lost its argot and small features that made membership exclusive to those familiar with norms and rules. New features were added, however, which made the community an effective vehicle to tackle projects.

Interactions. The nature of interactions between contributors to Anonymous had a clear influence on when and how the transitions between purposes took place. Because interactions between contributors to Anonymous projects are as short-lived as a single project, strong ties between individuals are rarely built. Interactions are typically matter-of-fact with no time devoted to relationship-building. This means that users joined and left projects at any moment without creating bonds that sustain continued commitment to a cause. So, if a project became less interesting, there was no peer pressure to continue participating. This form of peer pressure to commit to activism has been credited as one of the principal reasons why individuals participate in civic action – i.e. individuals seek out interactions with others and to participate in activities that reaffirm bonds (Della Porta and Diani 1999). In fact, ephemeral, asynchronous interactions enabled the rapid mobilization of participants in raids extremely quickly, particularly early in the community's development (Period 1). Rapid-fire and impersonal interactions within the Anonymous community also allowed for users to participate in Anonymous in its later form as a gateway for civic participation without becoming overly committed to Project Chanology (Period 4). These impersonal interactions were even extended to the physical world through the use of masks. As such, Anonymous

could adapt to fast-moving external triggers and counter the inertia caused by a deep focus on a single, targeted social change (e.g. change in a particular piece of legislation).

Notably, the nature of these interactions and the superficiality of the relationships formed within the Anonymous community also facilitated the prevalent mode of contribution to community efforts. Because they had little motivation in the form of relationships, reputation or accruing rewards (Chong 1991) users made "micro-contributions" that were dependent solely on their interest in a particular project rather than social pressure. So, instead of observing a dynamic in which a small group of devoted participants maintains and drives action within a community we see small contributions by a large number of users being the driving force behind the protest.

Interactions with external audiences, namely the media and other activists, influenced not only the purpose of the community but the means leveraged to execute that purpose. By intervening following the early attacks on the Church of Scientology website (Period 1), Mark Bunker and others led users within the Anonymous forums to question the effectiveness of their methods and to consider the long term effects of their pranksterism. Along with negative feedback from media, this critique pushed many Anons to experiment and eventually adopt traditional protest tactics. Relatedly, findings reveal how the distinction between members of online communities and external observers can become quite blurry. In fact, many newcomers to Anonymous in Period 2 were self-reported critics of the Church of Scientology prior to January 2008. After observing the community, they felt compelled to join in. Ultimately, the lack of personal identifiers characteristic of Anonymous (discussed below) enabled under-socialized newcomers to easily blend in and influence the community.

Identities. The ideas and initial purpose of Anonymous emerged had very particular characteristics that made use of the Internet as a malleable environment. Correll's (1995) study of an online "Lesbian Café" showcases how online spaces can provide a sense of safety and solidarity similar to what is experienced by those that attend physical gatherings. The café in Correll's study, as its name indicates, was designed

to emulate an actual café. Individuals posted using their actual names and could follow threads of conversations for months at a time. In the case of Anonymous, as its name implies, anonymity, i.e. the lack of personal identifiers, is built into many forms of computer-mediated communications, was designed into the website as a feature by founder Christopher Poole (aka moot) (Bernstein et al. 2011). Users without personal identifiers could post and exchange messages liberally, with little fear of reprisal from powerful actors (Caplan, Torpey and Marx 2001) meaning that individuals felt free to adopt the deviant forms of behavior crucial to engagement in pranks (Period 1). Contributors, protected by their anonymity rather than by the brick and mortar of a secluded room, suggested ideas and developed "troll" tendencies and a repertoire of hacker attacks. These elements were particularly influential as 4chan transitioned from being a Japanese animation fan site to becoming a haven for pranksters (Period 1). Anonymity, as imposed through the 4chan design, became part of the Anonymous ethos much like Biblical notions of forgiveness became embedded into a civil right movement that was largely born in churches (Morris 1986). When the schism took place in Anonymous (Period 3), many of the contributors wishing to deploy more contained tactics also created websites that were isomorphic with traditional social movement websites, shunning the idea that anonymity was important. Others adopted masks to retain the normative anonymity they experiences within the forum, furthering the schism that compelled the adoption of IRC networks that allowed for multiple, simultaneous purposes. In contrast to Chong (1991:50), who argues that self-interested "reputational concerns" motivate participation, the fact that most members in Anonymous maintained their anonymity throughout the conflict casts doubt on some studies that focus on self-aggrandizement as a driver of mobilization and involvement in social protest. Importantly, without accruing individual reputations, or any other individual incentives, only those that were willing to take on a collective identity thrived. Anonymous, as collective identity buttressed by individual anonymity, trumped individual ambitions and allowed community values (e.g., Lulz, freedom of expression) to remain central rather than becoming marginal as a result of formalization (Zald and Ash 1966).

Ultimately, the malleability of identity drive much of what Anonymous is able to do and characterizes much of what drives the transitions in purpose. Because personal identity (Pratt 2003) is absent in the interaction spaces populated by Anonymous, the idiosyncrasies that allow individuals to stand out and communities to ascribe reputation and determine worth are removed. As Postmes, Spears and Lea (1998) suggest in applying the SIDE (Social Identity Model of Deindividuation) perspective to anonymous participants in online environments, collective identities becomes more salient and concern over how reputation accrues to the collective remains a concern, if not an even greater concern. So although there seems to be a loss of self-consciousness that makes users relatively more aggressive and lewd in anonymous online environment (see Coleman 2010), radical behaviors are tempered by a concern with maintaining the integrity of a collective identity. When, for instance, Anonymous is faced with criticism from media, comments reflect aversion to having the Anonymous community be labeled terrorist or other purely negative labels. User concern with misinterpretation of their purpose and labeling that countered their own sense of what constituted their collective identity drove acquiescence (at least in part) to external audience concerns. Interestingly, as soon as users socialized into the Lulz-focused Anonymous realized that what was unique about their community was being supplanted, they either exited or sought a return to the identity and the related purpose they cherished. With the creation of the new interaction space in period 4, all extant identities and the purposes associated with them could coexist. Anonymous became what each user would make of it.

Conclusion

Anonymous' shifts in purpose provide a fascinating look into how communities that leverage the online environment can be both distinctive and influential. In fact, the Internet continues to be an interesting context because, by creating new sites with new capabilities and limitations, webmasters provide researchers with the opportunity to understand how a change in the tools and environment that support interaction can produce a ripple effect that changes even the most taken-for-granted behavior. If,

as Poletta (2004) claims, freedom requires "an endless meeting" rather than spurts of collective action we might, as both scholars and practitioners, turn to the Internet for a possible answer. That is, for platforms that enable individuals to devote their limited time to the causes they care about and participate in a new forms of activism which don't require physical presence.

Traditionally, studies of communities engaged in activism highlight issue-driven attempts at social change. For instance, gay community engagement in activism is often driven by equality goals for LGBT individuals, much like feminist groups seek out gender equality. Although Anonymous often engages in activities related to free expression on the Internet, contributors claim that that is but one of the issues the community is interested in. In its current manifestation, Anonymous has become a platform for civic participation – i.e. engagement in activities that transcend a single issue. Organizations such as the United Way provide a "one-stop-shop" for donors to conveniently donate to multiple causes. Instead of making small donations to multiple organizations, experts at the United Way select and perform due diligence on charities aligned with their mission. Similarly, as a platform for civic participation. Instead of donating funds, however, users donate their time in the form of micro-contributions to multiple ongoing projects. This platform allows for legal and illegal projects to coexist and gain support not because experts select them but because users choose to donate their time. As such, it provides a new, creative solution to social problems.

5 TAMING TROLLS: COORDINATING COLLECTIVE ACTION IN THE ANONYMOUS ONLINE COMMUNITY

This chapter examines how the Anonymous online community mobilized support for and executed complex tasks by developing a repertoire of coordinating practices that engendered integrating conditions (i.e., accountability, predictability, common understanding and adaptability) while maintaining user anonymity and eschewing bureaucratic authority structures. As such, it provides a compliment to the previous chapter's focus on purpose development by examining how different elements of purpose-driven activities were successfully executed. Unlike in groups and organizations highlighted in many extant studies, Anonymous was able to coordinate collective action without relying on established coordination mechanisms such as (1) formal, bureaucratic authority structures (e.g. hierarchy) and practices (e.g. direct supervision) or (2) trust built through face-to-face interactions. Repertoire formation took place through experimentation with new technologies and modes of interaction that became codified in online compendia. These experiments culminated in the creation of a platform through which tandem coordination of activities related to both activism and recreation became possible. Similar to Weick (1979), I use gerunds (i.e. verbs with '-ing' endings) to shift focus from static conceptualizations of coordination to an emphasis on more dynamic coordinating practices. This dynamism reflects the notion that coordinating transpires in a contexts requiring ongoing and concomitant problem-solving rather than in a stable and predictable contexts.

The Evolution of Coordinating Practices in the Anonymous Online Community

Table 5.1 traces the adoption of coordinating practices by users participating in activities organized under the Anonymous moniker. Gaps in community practices became evident as purpose shifted from recreation to activism and new goals and tasks related to these were assimilated. Changes across several dimensions (e.g., interaction spaces, audience interactions, etc.) detailed in the previous chapter, served as occasions for users to abandon existing practices, put new practices into effect or re-tool existing practices in each period. In the following, I present findings in a "analytical chronology" (Pettigrew 1990:280) that employs the same temporal brackets (Langley 1999) as the previous chapter as a means to structure content and reveal how changes that influenced purpose also led to changes in coordinating practices. It exposes (1) the changes that led to revisions of a repertoire of coordinating practices, (2) when and how these practices were used by Anonymous, (3) what integrating conditions were supported by these practices and (4) how user anonymity was maintained across periods. In each period, I also integrate analysis of why individual projects succeeded or failed in accomplishing stated objectives by examining their alignment with community purpose and their employment of coordinating practices. As noted in Chapter 3, successes and failure are ascertained after a project concludes and contributors access whether goals were achieved or not.

Insert Table 5.1 about here

Period 1 (Oct. 2003 – Dec. 2007) - Ad hoc coordination of small-scale raids. When

Anonymous began to engage in raids (i.e., coordinated attacks on websites) following the founding of 4chan (ca. 2003), the tasks involved were relatively simple and coordination of user efforts was achieved quickly. Although users lacked identifying information about who was responding to queries or commenting on posts (which could give them a foundation upon which to build trust), they willingly participated in activities that required increasing degrees of interdependence. The (1) anonymity of users, who did not adopt personal identifiers such as unique usernames, the (2) rapid-fire interactions characteristic of the 4chan forums and (3) remote locations of user access points, impeded the formation of any form of interpersonal trust. Instead, the widespread notion that users were aligned in a single purpose- the pursuit of Lulz - enabled users to securely engage with whoever was online. Shii, an early moderator of several 4chan forums, echoed this point by noting that "…users just get in and get together with whatever was going on. They post, join raids and do whatever to keep the Lulz going. Every b/tard was in it for the Lulz and I'm not sure why you were in there if you were't" (www.shii.org).

Calls for raids by original posters (knows as O.P.'s) gained support if a mass of users – many of whom were already mobilized for some form of action - agreed to participate by "bumping" (i.e., posting a short comment on the thread initiated by the original call). Calls were often interspersed between the politically incorrect threads characteristic of the /b forum of 4chan. Because all individuals involved took on roles of O.P.'s or raiders, there was no need for formal role assignment. As such, the key elements required for a successful raid were original posters with a compelling idea (one which cohered with the recreational orientation of the community) and contributors willing to follow instructions. Given the limited number of contributors to projects as well as the relative simplicity of the tasks, planning and execution took place within a few hours. This rapid engagement process meant projects that did not garner immediate support were discarded (e.g. calls for personal vendettas). Over time, these simple raids on unsuspecting sites became a hallmark activity of the community.

To illustrate, during the Habbo Hotel raids in mid-2006, users "flooded" into the Habbo virtual hotel environment by creating a mass of avatars and moving around the Habbo space in droves. These custom-made characters manned by 4channers would disrupt ongoing interactions between legitimate users of the site. Intermittent attacks escalated until Habbo community moderators ejected the perpetrators individually. Below is an original post calling for a raid on Habbo Hotel:

"...anon raids at habbo hotel US take place at the pool side room and we usually do /b/lockades and if we have enough /b/lackup we can do other stuff. You need a character that is all black with a big black afro and a black suit. Name can NOT have anything about /b/ ...you don't have to be creative as you will be banned A LOT. If you get banned there is no point in waiting the 2 or so hours. make a new account, any name,any e-mail. it says it sends an activation e-mail but you don't need to activate for it to work. accounts take about 30 seconds to make for epic fun." (June 2006)

Note that the post contains information on a location within the Habbo Hotel environment (i.e. U.S. servers, pool side room), instructions on what avatar to create so that all individuals involved in the raid are easily identifiable without the use of personal identifiers, as well as instructions on how to circumvent the banning system. Also, the author of the post asks that the avatar name not refer back to the /b forum so that the actions couldn't be traced back to the location where ongoing planning for subsequent attacks was taking place. These norms made coordinated collective action possible while balancing user's

preference for concealing identifying information. After the post was set, users suggested changes to parameters which were quickly incorporated into a revised post.

As Habbo raids became commonplace within the community, users compiled limitations of the Habbo environment for exploitation. One of the programming errors users identified, for instance, was that avatars could not walk through each other to reach places within the Habbo Hotel environment. This issue was exploited as users from /b/ began to block avatars wanting to enter Habbo's virtual pool. This caused frustration for newcomers in Habbo and was a source of amusement for Anons. After many so-called "/blockades" in Habbo's pool area (and banning of 4channers by the moderators of the site) the raids became more routinized.

As indicated in Table 5.1, dialogue which defined and redefined parameters was held continuously prior to, during and following the conclusion of raids. Continuous dialogue norms made these early operations highly adaptable to changing conditions and responsive to adverse reactions from targets. If Habbo Hotel programmers changed requirements for creating an account on their site, raiders could report the change, suggest fixes and alter plans within minutes. Continuous dialogue also allowed peers to request status updates, receive rapid responses, and to track each other's activities over time without relying on personal identifiers. As tasks were completed, users would often ask for additional instructions, suggest new courses of action and report on issues and exploit opportunities. Importantly, updates about the raids were posted in the same forum in which the original post was left, enabling users willing to rummage through other 4chan posts to track raid progress and gain a comprehensive view of activities.

Another coordinating practice that emerged in this period was the use of multimedia representations. As less experienced 4channers joined the Habbo raids, Anonymous users familiar with procedures and parameters became tired of repeating raid instructions. In response, a user created a graphic that could be easily posted on the image board for users that inquired about the raids. The first screenshot in Figure 5.1, shows an early multimedia representation shared among raid participants and embodies procedural knowledge translated into a data-rich image. Visual forms of multimedia representations shared in this period were designed specifically for the activity-at-hand and preempted user engagement in lengthy explanations of task parameters. By doing so, they mediated and structured the activity, ensuring common understanding between participants, independent of their sophistication. It also served as a complement to the continuous, asynchronous dialogue taking place within the forums because, unlike the call-response, text-based forms of communication, the information conveyed by the visual would not, as it might in a game of telephone, be distorted as they diffused from user to user. Notably, the creation of these representations also became a source of recreation for users interested in creating illustrations.

Insert Figure 5.1 about here

The success of raids and pranks during this period was a function of two important factors. First, as described in the previous chapter, only the activities that were aligned with the pursuit of recreation and not with personal vendettas or serious activism gained enough support in the 4chan forum. Suggestions from contributors abounded and only a few were selected and calls to action issued to the community-at-large. As Table 5.2 reveals, given the simplicity and small numbers involved in raids conducted in this period, proposals that gained approval of the community were executed successfully.

Insert Table 5.2 about here

In short, in this early period, Anonymous activities involved straightforward, simple raids. A common purpose shared by all participants – the pursuit of recreation – served as a substitute for interpersonal trust, enabling common understanding between users and supporting success in all raids and pranks. The small community used ad-hoc coordination, deciding through dialogue, like children in a playground setting, what the parameters of the game would be immediately before engaging in play. Like those children, they didn't need to know each other's names. Loose plans were established through

continuous dialogue, promoting adaptability to changing conditions and ensuring immediate accountability through constant contact. As Table 5.1 shows, the use of detailed multimedia representations (most in the form of step-by-step guides) helped ensure that original posts calling for raids did not lose fidelity as they diffused among contributors and across different interaction spaces. These visuals also allowed repetitive information to diffuse to users unfamiliar with procedures without creating a heavy burden for information-sharing. This early phase provided a stepping-stone from which more sophisticated practices could be developed.

Period 2 (Jan. 2008) – Coordinating Large-scale Hacktivism. Coordination issues rarely surfaced when the largely 4chan-based Anonymous community was engaged in raids against minor online targets for purely recreational purposes. Aided by detailed visual representations and constant dialogue between a small cadre of participants, execution occurred with little miscommunication. Following the call to attack the Church of Scientology in early 2008, however, coordination issues quickly suffused the community. Several changes led to this widespread concern: (1) greater task differentiation brought about by a more complex target, (2) variation in contributor experience and numbers caused by the sudden increase in participation and (3) lack of a unified guiding purpose, as some users were now focused on activism rather than recreation. Given these changes, simple instructions conveyed through asynchronous postings and visual representations were insufficient to ensure coordinated action. Image board threads where raids were discussed became congested with haphazard comments, making the call-response dynamics which made planning possible in the previous period largely untenable. Questions from newcomers, reports of missed exploit opportunities during raids and chatter concerning whether Anonymous could actually engage in complex projects proliferated. The following comment, posted on the /b image board following the first raid against the Church of Scientlogy website, echoes the frustration generated by new users and their lack of knowledge about how to conduct raids. Specifically, the new users did not conceal their Internet protocol (I.P.) addresses, making their location easy to trace.

"Listen /brothers, I've been around since before raids were called raidz and I can't handle these Scilon attacks. Newbs are in my house and I can't even hear my own thoughts. /b has to change. Better, faster, stronger so that we can actually get shit done. There are too many 'tards that think that they have skills. Last nite Anon was drilling for Lulz but all the other Anons had unmasked I.P.s, naked for all to see" (anonymous 4chan user, January 28, 2008).

As Table 5.2 suggests, mixed results in achieving objectives prompted action by Anonymous. To address these issues, changes were quickly implemented by entrepreneurial Anons. Many began supplementing asynchronous discussions on the image boards with synchronous chat in IRC channels hosted by third parties (e.g., Partyvan IRC network). IRC channels enabled users to co-create youtube.com videos that introduced Anonymous procedures to less experienced contributors as well as to draw up skeleton plans for innovative raids. More importantly, synchronous communication via IRC allowed questions to be asked in real-time and for users to be addressed directly (even if they still used 'Anonymous' as their username). These planning sessions became important as projects began to last longer and as, given their increased complexity, raids could not be executed immediately after a call by an original poster. They also, helped users avoid the congestion prevalent in the image boards. The image boards remained, however, a recruiting ground for new raids. Users would post so-called "Get in here!" calls as well as links to IRC channel on the boards to mobilize raids quickly.

In addition to the introduction of synchronous dialogue through IRC channels, two new coordinating practices were implemented in these first few months of engagement with the Church of Scientology. First, Anonymous contributors began using several wikis and archives as repositories not only of visual representations created by Anonymous members but of the community's past actions, norms and running jokes. Engagement in transparent documenting of all new Anonymous-related content through these repositories became commonplace, particularly among active contributors. The wikis were both a celebration of Anonymous accomplishments and a means to educate newcomers about the community they were joining, furthering the building of a common understanding of different tasks and motives behind these tasks required for effective coordination. Instead of taking on the ephemeral nature of the forums in which these projects were originated, archives were able to survive as reminders of past

successes and models for the future. Encyclopedia Drammatica was the most popular of these repositories, serving as a "compendium for troll lore" and socialization tool. Contributors seeking to formalize many of the norms, rules and practices that had developed within Anonymous or celebrate a growing litany of successful hacks, raids and protests, added to these archives regularly and directed newcomers to these archives. Unlike traditional archives for organizations, and much like Wikipedia, these archives were curated and supported by anyone willing to contribute their time.

A second practice that emerged at this stage was the public testing of knowledge of contributors participating in project-related tasks. Experienced users issued "challenges" to members they perceived were not technically competent or familiar with the norms of the community. These tests consisted of simple programming puzzles or questions about the history of the community and its many raids. They sought to ensure that users who wanted to contribute to projects would first become familiar with the technical requirements and normative aspects of Anonymous activism (often through the wiki repositories of Anonymous projects). Moreover, given the absence of personal identifiers, it was impossible to hold individual users accountable for missteps during or following raids, these tests served to preempt issues related to user incompetence and serve as a proxy for more formal accountability measures. These tests differed from assessments administered in formal organizations during selection because they often focused on timely and task-specific knowledge that might not have been relevant when a contributor joined the Anonymous community. They could also be requested by newcomers seeking to understand whether the peers they were working with actually had the background to teach sophisticated skills. Altogether, these sporadic tests of user knowledge, served as a substitute for the trust engendered through alignment of purpose characteristic of the first period.

Over time, and particularly as new complex tasks were introduced, coordinating practices became increasingly interconnected. The use of Distributed Denial of Service (DDoS) attack tools to take down Church of Scientology websites, for instance, required not only tested expertise but the use of youtube.com videos that ensured that contributors to raids were aligned in objective, time, and location.

Visual representations had to be malleable enough to adapt to local needs and constraints of the several parties involved in a single attack, yet robust enough to maintain a common message across sites and support user anonymity. Moreover, content needed to be created in the repositories that explained the use of tools and what Anonymous was to newcomers. The creative work involved in creating these objects, manifestoes and tutorials meant dedicated contributors had to join IRC channels that allowed for "real-time" planning as well as criticism of ideas. Anonymous members split into "cells" charged with creating content and executing on the broader objective set on the image boards. Eventually, Anonymous grew increasingly effective at conducting hacker-style attacks and resilient to the high turnover of contributors it experienced and more responsive to increasing task variety. As noted in the previous chapter, however, a lack of alignment in purpose would continue to plague the community and pull it apart.

In sum, reacting to several changes brought on by a new focus on dismantling the Church of Scientology, Anonymous added several coordinating practices to their repertoire and modified others. Some of the practices that were put in place during the earlier phases of the community's development (e.g. continuous dialogue took place both asynchronously and synchronously) were adapted to suit growing numbers of contributors across a number of new forums. New practices, such as the testing of contributor understanding and transparent documenting via information repositories, were adopted to address growing disparities in contributor socialization and to address rising issues related maintaining a sustainable knowledge base. Practices became increasingly interdependent, resembling a cohesive repertoire rather than a loose arrangement of practices used ad hoc by contributors. Even with the adoption of new coordinating practices and increasing repertoire cohesiveness, however, Anonymous had become divided in terms of its guiding purpose as the number of activism-focused users grew.

Period 3 (Feb. 2008 – May 2009) – Repertoire expansion for traditional protest. Following criticism from media and Scientology critics and a rapid influx of vocal, activism-focused newcomers, traditional protest tactics such as street protests and sit-ins were adopted by many in the community.

Changes to modus operandi brought on by offline activity were widespread during this transition, producing several modifications to what many Anons considered business-as-usual: (1) the pace at which activities were organized, particularly offline activities, slowed considerably. Logistical matters involved in offline protests (e.g. permits) required careful planning and new expertise that the computer-savvy Anonymous contributors did not possess. (2) Street protests required a critical mass of users willing to commit to offline contribution and to taking physical risks (e.g. arrest and retaliation). Thus, building a base of volunteers took considerably more time than it did for online activities. (3) The task of organizing street protests proved antagonistic and cumbersome – given many of the contributors were willing to protest locally, but not to travel to distant locations, be exposed to violence or spend money on permits and signage.

Coordinating practices were introduced or modified to accommodate the need to straddle online (e.g. online forums and IRC chat rooms) and offline (e.g. parks, sidewalks) interaction spaces. A focus on more locally-driven, awareness-generating tactics, such as the handing out of pamphlets in cities where protests took place became necessary to drive protest attendance. Local online forums restricted to participants from Boston, Los Angeles and other large U.S. cities, both within and outside of increasingly popular IRC forums, were created by Anonymous contributors looking for local volunteers willing to hold up signs and hand out flyers. Multimedia representations were re-designed to be printer-friendly as well as appealing to a passerby on the street (see screenshot for third period in Figure 5.1). The information contained in these flyers often detailed explanations of what the Anonymous community was and what it stood for as well as maps, meet-up locations and anti-Scientology propaganda. Notably, many of these contained a particular user's interpretation of Anonymous' purpose – many focused on human rights or local issues. Others guided users to sites that were affiliated with established Church of Scientology critics. In short, contributors spread the word about Anonymous and Project Chanology by translating their understanding of the conflict, however narrow or broad, into pamphlets that were posted online and shared in face-to-face interactions with people on the street. Sites connected with allied groups

gained greater prominence as sources of information about how to conduct sit-ins, how to design effective signage and how to avoid getting arrested.

In addition to changes to existing practices, two *new* coordinating practices were introduced during this period (see Table 5.1). Increased monitoring of interactions taking place within IRC channels began when several users, many claiming experience in coordinating large-scale operations, took it upon themselves to identify IRC channels where activities that ran counter to so-called "Anonymous principles" or that might draw the attention of authorities were taking place. These self-proclaimed monitors would then shame these "deviants" on Anonymous image boards by posting and analyzing chat logs. These acts of shaming did not result in any form of explicit punishment, but they did alert the community of growing defiance of more tempered norms by Lulz-focused Anons. They also served as calls for greater cohesion and accountability across the ranks.

Real-time, global updating practices also connected offline action to online observers and aided in coordinating efforts. On the date of the first Anonymous street protest (Feb 10, 2008), over 7000 Anonymous members from 100 cities across the globe came together in protest in front of Scientology churches. During the protests, Anonymous members chose to record and stream their actions using digital cameras to both protect themselves from legal backlash, but also to have more control over how the protests were presented in the media: something that has persisted in later protests. These videos were uploaded into sharing sites (e.g. youtube, vimeo) and used by contributors as propaganda for their cause and as a means to diffuse new practices that emerged during protests. The most popular among these practices was the use of masks, particularly Guy Fawkes masks, to both keep protester identities protected (thereby avoiding retaliation) and to extend the normative anonymity enjoyed in the forums. Soon, Anonymous protests became easily identifiable by mainstream media as gatherings where users donned masks and created signs using cryptic "hacker-speak". Twitter was also used by contributors during this period to report on protest attendance numbers or make general comments about current events. Certain
feeds, such as @AnonNews, became increasingly specialized providing news for Anonymous contributors by Anonymous contributors.

In short, in this third period the community made its tactics more palatable to outsiders by adopting accepted forms of protest (instead of hacktivist tactics) and adjusted to an influx of newcomers pushing for engagement in more traditional protest tactics. In attempts to shed light on the actions of contributors that did not comply with a move to more audience-friendly, legal tactics practices such as monitoring or interaction were introduced across the community. The use of tools such as Twitter and video streamed from protests made the diffusion of a shared perspective between forums and physical protests simpler and made the task of updating a more prevalent practice across the entire community. Contributors were now expected to subscribe to Twitter feeds, participate in IRC channels as well as to monitor the image boards. While these practices provided greater immersion into Anonymous activities and increased the level of understanding each contributor had of larger-scale tasks, the task of monitoring all of these channels and engaging in traditional forms of protest led many to lose interest in participating. The stimulating hacktivism that made Anonymous popular with many users had been supplanted by a less spectacular of protest. Importantly, the community remained divided regarding whether it should seek purpose in activism or recreation.

Period 4 (Jun. 2009 - Feb. 2011) - Tandem Coordination of Activism and Recreation via IRC

Gateway. Several months after contributors lost interest in Project Chanology, a new Anonymous emerged. It was more complex and ambitious, representing the culmination of contributor attempts to implement coordinating practices that allowed for effective and sustained collective action online and offline. Triggered, in part, by Indian security firm AiPlex's Denial of Service attacks on a file sharing website, Anonymous users attending IRC channels and forums realized that retaliation would require greater sophistication on their part as well as a new repertoire of attacks. In addition, eager contributors saw the new attack as an opportunity to address issues they had identified in previous campaigns. They wished to tackle the notion that large projects were favored over smaller ones; that is, many worthwhile projects were not attended to simply because the structure of the forums did not allow smaller projects to gain visibility: "We keep getting deep into these massive operations that bog Anon down and don't allow focus on other shit like going to work or aiming our guns at smaller fish. We can't afford another newfag shitstorm." (Anonops IRC, June 2009). Contributors also sought to prevent the waves of interest and disinterest that threatened the growing influence of the community. In essence, when the majority of users joined a single project, the community became susceptible to demobilization cycles – large projects meant large outflows of users interested in the early mobilization of efforts but bored by the actual execution of project goals. Lastly, they wanted to create tools that enabled the tackling of new, more differentiated tasks that had become important as the attacks on more sophisticated targets that were equipped to handle simple denial of service attacks increased. Importantly, this was the first period in which users were making a concerted effort to create a more efficient and equitable platform that allowed for both activism *and* recreation.

After several weeks of deliberation across Anonymous forums, users decided to build on a tool they had already been using: IRC channels. Instead of relying on existing, third-party IRC networks that would agree to host Anonymous channels, however, contributors slowly built their own independent server networks, which they could manage and shape as they pleased. Individuals in countries (particularly Scandinavian countries) that either protected certain forms of hacking and online protest as forms of free speech or did not enforce legislation against hackers, volunteered space in servers that would support a new influx of contributors leading to creation of many independent IRC channels. In addition, several users volunteered their botnets – spyware networks that would use infected computers to attacks targets. Below is a transcription of a post requesting user participation in a raid built on this new network:

"Aiplex, the bastard hire gun that DDoS'd TPB is already down!...Now we have out lasers primed, but what do we target now? We target the bastard group that has thus far led this charge against our websites, like The Pirate Bay. We target MPAA.ORG! The IP is designated at "216.20.162.10", and out firing time remains THE SAME. All details are just as before, but we have re-aimed our crosshairs on this much larger target. We have the manpower, we have the botnets, it's time we do to them what they keep doing to us. IRC: IRC.RIZON.NET #SAVETPB Good Hunting."

Note that in this post users were expected to be familiar with several routines and tools used by Anonymous previously. This order to switch targets posted on imageboards and IRC channels contained targeting instructions for the less knowledgeable contributors. It was sent out after knowledgeable hackers had already eliminated Aiplex's online presence and crashed their servers. Shorthand for websites and addresses has also become commonplace. That is, users with different skills levels engaged in a "handoff" made possible through the new IRC network.

The way in which Anonymous ordered their operations changed throughout the community. First, users organized by operators (which were now sometimes but not always project initiators) in a dedicated IRC channel would create content to drum up support for projects and justify attacks using social media sites such as Facebook, Twitter and YouTube in addition to several imageboards. As support was gathered for an operation, a handful of skilled hackers used vulnerability assessment tools to probe for security holes and launch application attacks. These included SQL injection, a technique used to attack databases through websites and attempt to steal data from targets. Third, organizers in IRC channels would send out banners to laypeople in imageboards and forums to trigger more simple hacks such as denial of service attacks, and other forms of virtual sit-ins and nuisance campaigns.

This final step was made safer for users and simpler to organize as new tools developed either by Anonymous contributors or third parties friendly to Anonymous causes were made available to users on imageboards, enabling them to participate in Anonymous attacks even though they did not possess sophisticated hacker skillsets. An educational bot (automated program) on some of AnonOps IRC channels delivered tutorials on laws regarding computer activity, how to stay anonymous on the Internet, and similar lessons. The Low Orbit Ion Cannon, an open source network stress testing and denial-ofservice attack application, was initially developed by Praetox Technologies, but was later released into the public domain, and now was hosted on several open source platforms and used by Anonymous contributors. It allowed users to either select a target of their choice for a Denial of Service attack or to give up control of their targets to operators in the IRC network, in essence allowing operators to decide where attacks were needed. Users also began to use more sophisticated I.P. masking tools that protected their identity not only from users outside the networks but from other Anons.

The role of the operators, IRC channel arbiters and key contributors to many Anonymous projects, became more pronounced over time. As they created new channels to accommodate the needs of the community and each project and coordinated the production of content and the organization of hacktivist activities. Operators also engaged in policing of IRC channels, banning users constantly connecting and disconnecting or in the case of Anonops, banning those purposefully targeting the media or promoting violence. To be an operator (also known as ops) for a project did not require that one be highly technically skilled, only that one devote time to coordinating activities. Although their opinions carried more weight during the many debates that unfolded on these networks, they did not determine the course of every action or operation within Anonymous. Some operators only provided infrastructural support, while others engaged in many of the political operations. Individuals that proved to be skillful in more straightforward operations were invited to join private channels (e.g. #command) and were made into operators by more established network operators. In essence, Anonymous began experimenting with a layer of leaders that had no formal authority over users but that could control the rules of the spaces in which they interacted.

Furthermore, tools such as PiratePad, a web-based word processor designed for working collaboratively in real-time, allowed for the creation of manifestoes, banners, press releases and other documents not only more quickly, but also with the participation of a larger number of users. The screenshot in Figure 5.2 contains an example of an attack plan for a project formulated using PiratePad. Note that the plan was written by 31 contributors, many of whom write simultaneously until the plan is deemed actionable.

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Insert Figure 5.2 about here

The use of these new tools and the introduction of an Anonymous-controlled network of IRC channels enabled the introduction of a new coordinating practice: simulated practicing. Because IRC channels were permanently dedicated to a particular project, operators could practice for an operation multiple times before they launched the official hacker attack. Different possible ways of performing the attacks were attempted using "dummy sites", allowing for corrections to be made to plans before official execution. Debriefing on what transpired in practice runs and following actual attacks could take place on these same channels. Many of these debriefing sessions also served as a way for operators to suggest a new operation to a group of users energized by a success or eager to attempt to make up for a failed operation. Finally, channels that offered specific training on tools and tactics used by Anonymous were created within the network, further codifying practices and formalizing their teaching.

Anonymous soon became a political gateway and a pathway to different forms of civic participation for many individuals that sought recreation or to engage in online activism. Anonymous provided discrete protest possibilities that were not otherwise available through social movement organizations or other Internet-based modes of political organization. Contributors are not required to fill out forms with personal information, donate money, but are still able to make a personal and active contribution to a political effort or to simply jump into a channel for a few hours and have some fun.

Discussion

I have shown how Anonymous underwent several iterations characterized by an evolving repertoire of coordinating practices to become a gateway for civic participation. In the following, I discuss (1) how this repertoire took shape despite a lack of a traditional authority structure and (2) how these practices engendered integrating conditions that make coordinated collective action possible in an online environment.

"Bottom-up" repertoire formation. Although studies have focused on collective actors guided by a leader-determined vision of how the coordination of tasks should take place, bottom-up organizing in the Anonymous online community meant that the structure underlying how task coordination took place was not entirely pre-determined or ordered by leaders. The founder of 4chan, Christopher Poole, left an imprint (Stinchcombe 1965) of how a community should operate by making all contributors anonymous through website design, yet most of the community's modus operandi evolved from trial and error and ongoing experimentation with new practices taking place thereafter. The online environment and specific design of the 4chan site both enabled and set limits on the forms of contributor interactions and the types of tasks they could engage in. Growing disdain for traditional leadership models as well as reputation-driven participation, guided the creation of a complex repertoire of practices (Tilly 1978) supported by and enmeshed with technology platforms. This repertoire evolved over time as users both reacted to issues that arose as the community attempted to accomplish increasingly complex tasks and proactively proposed new practices to improve existing processes. In short, practices fluctuated to adapt to conditions of uncertainty, novelty, and change or in reaction to disruptions in extant conceptions of how a certain type of task might be accomplished (Adler 1995; Argote 1982).

The introduction of new coordinating practices and technologies that enabled these practices stemmed from various sources. The introduction of transparent documenting, for instance, as a common practice within the community arose from multiple sources. Contributors interested in creating a place to store screenshots of raids and heroic hacks of challenging targets created and populated entries for the Anonymous community on general compendia such as Wikipedia. Other anonymous users created sites such as Encyclopedia Dramatica that became a repository not just for Anonymous exploits, but also for pieces of troll culture more generally. Many users took the time to collect many of the posts placed on 4chan for posterity and to ensure the survival of interactions they deemed important. In fact, not only were these repositories not created by formal leaders, they were populated by collectives of users with a

shared interest in transparent documenting. Routines became codified in these repositories as both patterns developed through the enactment of actions and translated to more generalizable abstract form (what Jarzabkowski, Lê, and Feldman 2012 called ostensive aspects). In other words, the wikis would contain both detailed recounting of events but also analyses of these events involving categorization of behaviors into tactics and strategies. While more focused on creating "useful" content, this documenting behavior is similar to those of fan clubs and museums – while some are created "top-down" by corporate sponsors others are the product of "bottom-up" gathering of artifacts and community-building by collectors and those who wish to share their passion. Unlike their offline repositories, however, updates to entries were made often and by anyone who thought they could improve upon existing content.

The Anonymous process of practice adoption was far less predictable than adoption in traditional work or social movement organization (see Tilly 1978 for a review of the adoption of new practices in civil rights organizations). Because there was no formal leadership or management dictating whether or not users should engage in a particular practice (as described in Morris and Staggenborg 2008) some parts of the community would adopt a practice and others would imitate if they perceived it to be useful for a particular task or appropriate as a means of ensuring greater task efficiency. Several practices were either discarded or adopted by a small segment of the community for a limited period of time. For instance, password protected forums were created outside of 4chan early in the development of the community to prevent many of the issues with newcomer influx -i.e. lack of context and task knowledge. However, the volume of user contributions in those forums did not provide enough manpower to allow for raids to take place. Many users suggested that the use of password protection went counter to Anonymous' ethos of a free and open Internet. In short, they rejected the notion that users should be excluded simply because they were not socialized into community norms or familiar with task-related procedures. Other practices, such as communication monitoring practices, were adopted by some operators and channel contributors and not by others leaving many users confused about whether they were being observed by an operator or not. This practice never spread across all interaction platforms because operators were fond of

implementing their own style of moderation within the channels and forums for which they claimed responsibility.

Because of the lack of direction from formal leaders the process of introduction and adoption of new coordinating practices within Anonymous became highly democratic and predictably contentious. It was characterized by heated discussions about the effectiveness of certain practices, experiments with new tools and procedures, as well as constant fiddling with established practices. Users were regularly seeking to improve upon the work of predecessors and propose fixes to existing problems – a tenet of the hacker culture in which much of the community was immersed. A key piece in this dynamic was the use of technologies, both as platforms upon which discussions of new practices took place or as behaviors enabled or facilitated by technology. The Ion Cannon tool, for instance, enabled the coordination of thousands of users across the world. Twitter enabled users to engage in real-time updating of the entire community rather than having to post comments in multiple Anonymous forums and channels. IRC networks enabled the use of synchronous communication between users engaged in time-sensitive projects, while also providing a platform for the introduction of new practices. Unlike in the case of the disruptive influence of medical imaging devices described by Barley (1986), the availability of new technologies led to new occasions for structuring action but also as occasions for the reconceptualization of a technology. Tools were re-cast to support coordinating practices and sometimes re-programmed by contributors to facilitate use by laypeople. That is, technology was not seen as an unchangeable force over which actors had no power but as malleable tools that could be customized to fit complex tasks.

A key finding that underlies the practice-formation process is the link between the purpose of the community, as described in the previous chapter, and the introduction of new coordinating practices. In the case of Anonymous, changes in purpose were linked with different goals and sets of tasks. Each transition revealed deficiencies in the Anonymous repertoire and created an occasion for improvement or addition. At the same time, the influx of newcomers (e.g. those attracted to the spectacle of hacker attacks as well as international contributors) that characterized some of the transitions led to the rapid

introduction of novel practices, independent of whether an absence was identified a priori (as claimed by Jarzabkowski, Lê, and Feldman 2012). In effect, new contributors allowed for innovative practices to enter the community and quickly displace practices or add to the repertoire – i.e., new users both identified gaps in the repertoire and argued for what they believed were better ways of doing things. This rapid succession of changes in the repertoire of practices became possible for several reasons. First, no practice became entrenched because users did not claim ownership of practices or had their reputation linked to their adoption or rejection. As such, experimentation and trials with new practices did not come at a personal price for users. Second, the changes in the composition of tasks by larger numbers and a more diverse community possible and working to retain characteristics of older iterations of the community (e.g. a sense that every individual could contribute with their efforts). Over time, these practices and the identity that supported them became codified in wikis via programming into tools, thereby strengthening a collective curated memory from which all users could draw (Pratt 2003).

Engendering Integrating Conditions through Coordinating Practices. To help make sense of how Anonymous evolved a repertoire of coordinating practices that enabled coordinated collective action, I use and add to the notion of integrating conditions developed by Okhuysen and Bechky (2009). According to Okhuysen and Bechky (2009), the establishment of integrating conditions such as accountability, predictability and common understanding through the implementation of practices that advance each of these elements, enables coordinated collective action. By revealing how research in various contexts can be understood through the lens of integrating conditions, the authors set a framework from which other scholars can build. The Anonymous case allows me to elaborate on their theorizing by suggesting several additions and modifications.

First, I suggest that *adaptability* - the ability to change (or be changed) to fit changed circumstances – is useful as a required integrating condition. This is particularly the case if coordination

is conceived of as a dynamic process rather than a static state. This dynamism is made more transparent in contexts where changes happen quickly and unpredictably as is the case for Anonymous and the online environment in which it exists. As I show in Table 5.2 below, several coordinating practices implemented by Anonymous enable greater adaptability to novel tasks demanded by new iterations. To illustrate, the always-on dialogue taking place synchronously and asynchronously between Anonymous contributors engenders both accountability and adaptability. Research has assumed that assume increased familiarity leads to stronger relationships, which encourages individuals to embrace their interdependence and allow them to more effectively coordinate (Gittell, 2002, p. 1410) and adapt to unfamiliar conditions. Because of the normative anonymity to which they are bound, few of the Anonymous contributors had that luxury of building long term relationships that transcended a single project. With the exception of users that were operators participating in small skilled cells, many did not adopt stable usernames. As a proxy, users would very openly communicate not only their intended course of action but elaborate on contingency plans in case a situation did not turn out as predicted. Adjustment would then be aided through constant, direct communication across several channels. At the cell level, communication took place through IRC, and when the whole community was involved, adjustment and increased adaptability to changing conditions could happen through the use of broad reach updating tools such as Twitter. Moreover, even though personal identifiers might not be present, constant communication ensures that all contributors are accounted for throughout an operation.

This dynamic allowed Anonymous to operate in a manner similar to what Faraj and Xiao (2006) identify as "plug and play teams" Faraj and Xiao (2006) wihout the use of professional control, formal roles, or hierarchy. In short, users would self-select into forums that required their expertise and monitor each other to ensure that tasks were being completed correctly and on a timely basis. It was often unnecessary for operators to interfere as lateral interactions, i.e. peer supervision, between contributors typically resolved deviance. Therefore, monitoring was made possible not because of proximity, but because of the use rapid-fire interactions and clarity of the initial call left little space for deviance.

Therefore, while early studies identified proximity as a determinant of level of interaction and resilience of coordination practices (e.g. Allen 1977), Anonymous contributors engage in intense communication despite geographic distance. Adaptability is helped through always-on dialogue because users can collectively decide to switch approaches, quickly transitioning between tactics, and ensuring that their efforts remain coordinated through transitions and when facing uncertain contexts. Users rely on constant dialogue for cues regarding when to change behaviors – these have to be made explicit (through text) in IRC channel interactions and are not coded into facial expressions used offline. Because peers do not know the skill level of contributors they are often forced to make their expectations and instructions as simple to understand and transparent as possible, decreasing the time it takes for common understanding to be reached, but also ensuring that misinterpretation of reports or instructions rarely take place. "heedful interrelating" (Weick 1993) and real-time anticipation of the actions and needs of others (Rico, Sanchez-Manzanares, Gil and Gibson 2008, p. 164) are thereby instituted because of the requirements of the medium through which interactions take place.

Second, while Okhuysen and Bechky (2009) focus on how particular practices promote singular integrating conditions, I show that some coordinating practices can simultaneously promote more than one integrating condition. For instance, transparent documenting of activities ensures accountability because all contributors are given equal access to logs of raids and hacker attacks posted by other contributors. In studies of geographically distributed work (e.g. software development, Metiu 2006) social actors rely on e-mail to account for work progress and schedule meetings via remote conferencing software to account for work progress and coordinate future work. In Anonymous, in addition to maintaining constant connectivity with an IRC channels during an operation or even through cell phones, many users maintain twitter accounts and update wikis of their exploits in addition to providing public status reports to their particular channel. These behaviors mirror observations by Kellogg et al. (2006, p. 29) that describe how non-proximal work groups in a Web-advertising firm engaged in "display practices" in which they post work-in-process online. However, in Anonymous same coordinating practice can also engender common understanding given the whole repository of information upon which common understanding is built is made available through wikis and other compendia. Routines developed and were catalogued in archival wikis for all to see providing trajectories that could be studied by newcomers and evaluated by other operators and contributors. Operators would select among the most "elegant" raids and imitate their procedures in their own channels. These became a sort of "living history" of the community which, in turn, set expectations and norms for what was appropriate within the context of a project and created an archive of practices attached to these stories. Ultimately, these archives, along with dialogue within IRC channels became sources for common understanding between contributors and similar to NASA engineers in Mark's (2002) study, these histories provide a "map" of what should happen when and why.

Other practices, such as the use of boundary objects (e.g. banners, guides, pamphlets, videos) were used to creating more specific common understanding as well as increased predictability by specifying particular ways to complete tasks. Because they facilitate learning across groups, objects help groups translate their different understandings tasks to create a common perspective. For instance, Bechky (2003) shows how, by demonstrating with prototypes, engineers and assemblers create a crude understanding of the production process which is later enhanced through practice. In Anonymous, users observed YouTube videos of particular operations and read logs that were created as links within IRC channels. Similar to a briefing soldiers receive before entering combat, these sessions provided contributors with an opportunity to become updated with target knowledge and build an understanding of what to expect.

Relatedly, what integrating condition is emphasized or engendered by a particular coordinating practice can vary over time, as in the case of contributor testing. While contributor testing was used to ensure accountability from the first instance in which Anonymous became involved in activism, over time users were tested for whether they possessed the shared understanding of community norms. In fact, this emphasis on norms was triggered by a shared perception by long-time contributors to the community that

there had been a loss of the lulz-focused troll culture which permeated the community soon after its founding. Altogether, the dynamic view of repertoire formation offered here reflects the experiences of a community which, unlike studies of work organizations and social movement actors, had to cope with several changes in purpose accompanied by equally different task requirements.

Third, I show that while Anonymous contributors worked to promote integrating conditions to facilitate the accomplishment tasks that fulfilled a purpose, they also limited implemented several practices that prevented external audiences from creating issues for the community. For instance, the group maintains anonymity through the use of pseudonyms or masks during physical protests to prevent external audiences (e.g. law enforcement, antagonists) from holding individual contributors accountable for participating in illegal activities or from targeting contributors for retaliation. That is, what was an integrating condition for insiders could have been a liability if exploited by others. Through anonymity, the community is able to balance those concerns. Similar attempts to protect the community can also be seen in other practices. Anonymous maintains a fast-pace of activity and introduces variety in the types of attacks and tools used to stay one step ahead of law enforcement agencies and security firms (e.g. HBGary) trying to figure out and protect targets from Anonymous. Similarly, Anonymous uses argot, i.e. an ever-evolving slang shared within the community, to ensure that outsiders lag in understanding of what is transpiring and don't achieve the common understanding shared by those that have lurked around forums for months. Finally, Anonymous changes the way it coordinates practices and experiments with the latest techniques to adapt to changing conditions but also to ensure that external actors don't adapt to their attacks. In short, Anonymous implements several practices that ensure integrating conditions they engender through coordinating practices can't be turned against them. These concealing practices provide them with a sense of security and freedom from scrutiny necessary for cultural experimentation and innovation (Melucci 1996). Importantly, affordances related to concealment become crucial to the creation and maintenance of the free space (Poletta 2001), need to support the work and survival of an oppositional, externally-focused community, particularly one that is engaging in illegal activities.

Conclusion

This chapter sought to provide a glimpse into how Anonymous evolved a rich repertoire of coordinating practices and to closely examine how this repertoire allows them to engender accountability, predictability and common understanding (Okhuysen and Bechky 2009), as well as adaptability. I describe how the community used technology to provide members with a gateway for participation in a plethora of projects. Most of these technologies were developed by contributors to the community in a "bottom-up" fashion that did not require the dictates of the types of formal leaders typically seen in work organization, although individuals did take on leadership roles (e.g. operators) to facilitate the formulation and diffusion of ideas and often played a part in implementation. I found that changes in the toolkit of contributors and operators coincided with transitions in the types of contributors to the forums and a dynamic of surpassing the accomplishments and improving upon the processes enabling projects. This dynamic triggered the creation of tools and the adoption of practices that became normalized through continued use and adjustment by cells within the community.

As O'Mahony (2007) points out, new community-managed models with a diversity of stakeholders are emerging online, yet little research exists to compare community forms. While earlier studies focused on creating highly predictable task environments such as factories (e.g. Taylor 1914, assembly lines) and more recent studies have examined how coordination takes place in high adaptive organizations and volatile contexts (e.g. police officers in crisis teams, Bechky and Okhuysen 2011), the coordination of collective action online and the practices that make it viable is still a promising yet understudied topic. Greater attention needs to be paid to how these practices differ across contexts and by sub-cultures involved in diverse forms of collective action. As we build knowledge regarding how means of coordination emerge from or lead to new organizational variants we can attempt to examine whether these practices could (and perhaps should) be pursued by more established forms.

6 INSURGENCY ON THE INTERNET: CONCLUSION AND FUTURE RESEARCH

At the onset of this dissertation, I stressed the importance of understanding the community as a source social change - whether online, in more traditional, face-to-face instances or when they straddle online and offline environments. I posited that the Internet has enabled changes in how individuals interact with each other and organize for social change, not only by making activism less expensive and faster to organize, but by producing changes in how key dimensions underlying organizing processes are instantiated. More malleable personal identifiers, permeable boundaries to participation and greater choice in how and when individuals interact (Bimber 2003) and unique programmed relational free spaces (Kellogg 2009, Poletta 1999) have become prevalent online producing alternative authority structures (O'Mahony and Bechky 2008) and different paths to common purpose that remain understudied. Distinctions combine to make online communities vehicles for civic participation and organization of collective action worthy of attention because they add to the diversity of means through which social problems can be tackled (Rao 1998).

To closely examine how online community forms enact and enrich theories of organizing, including streams in collective action and coordination, I conducted an inductive study that traced the transitions in purpose of an online community, from recreation to activism, as well as how the community leveraged coordinating practices to make hacker attacks, protests and other forms of collective action possible without bureaucracy or face-to-face, trust-based arrangements. In doing so, I answered calls to recast online communities as a fundamental source of resistance to or change in social practices and ideas (Earl and Kimport 2011, McCammon 2001, Melucci 1996) that, until recently, have remained understudied and often relegated to the "shadow of organizations" (O'Mahony and Lakhani 2011).

Lifting this shadow requires analysis the micro-social changes occasioned by new technologies (Barley 1990) and subcultural experimentation (Melucci 1996). Ethnographic methods helped me avoid the technological determinism or oversimplification of cultural factors seen in most studies of Internet-

based collective action (Earl and Kimport 2011) by allowing me to account for the influence of both culture *and* technology on Anonymous - a community in which both of these elements are present but not immediately decipherable to outsiders. Moreover, although some researchers point to the ephemerality of online community-driven projects (Bernstein et al. 2011) and often note the lack of structure in the community form, I am able to show the importance of structures made tangible through the creation (or coding) of free, interaction or relational spaces (Poletta 1999, Kellogg et al. 2006) such as IRC networks and image boards and the adoption of norms of anonymity when it comes to personal identifiers and transparency of process and practices.

I conclude this dissertation by (1) summarizing and integrating its contributions to theory, (2) discussing limitations and issues of generalizability and (3) suggesting possible future directions for scholarly research.

Contributions to Theory

I limited the scope of the study to two interrelated empirical puzzles. First, I examined how transitions in purpose take place within an online environment. I then focused on how the activities that enact this purpose are coordinated. Findings that emerged from considering these puzzles both as standalone inquiries and in tandem have produced several insights that enrich extant theories. The sections presented below put these findings in context, integrating their insights and relating them to streams of ongoing research including new forms, Internet-based collective action, and coordination in non-bureaucratic environments.

New Forms: Community in an Online Environment

Research in collective action and organizational streams have been heavily focused on formalized, bureaucratized, organizational actors, subsuming community forms to the background and often discounting the significance of communities as means of organizing (O'Mahony and Lakhani 2010).

The research presented in this dissertation places the community form, particularly instances of the form that leverage online affordances, at the forefront, examining how they exhibit different processes and produce diverse outcomes from social movement organizations and advocacy groups that are the usual protagonists in collective action research and work organizations that dominate research on new forms of organizing. I began this dissertation by examining how the study of community has changed over time as the nature of what is considered a 'community' has been elaborated by scholarship. Tönnies and Durkheim focused on the transition between village and city life brought about by the industrial revolution, triggering several waves of scholarship on community. I build on the work of scholars focused on the transition from so-called 'analog' lifestyles where connections are made face-to-face and actions taken physically to digital lifestyles that straddle online and offline spaces, revealing several findings that reveal what community means in this context.

Scholars who study organizational forms note that new form creation is not the work of lone, creative entrepreneurs, but the result of a political process in which multiple actors take part (see Fligstein, 1996; Rao, 1998; Davis and McAdam 2000). Among these, Rao (1998) notes that a new form arises when there is some sort of consensus or operative truce between social actors. As I've shown through the descriptions of the Anonymous community, community forms, particularly those in malleable online environments and with limited control over symbolic boundaries, are liable to display a more dynamic form of consensus or to never reach consensus over mode of organizing at all. Although I refer to Anonymous as an online community, the findings on this paper present evidence that change rather than stability was the norm in terms of membership, purpose and practices supporting coordination; I use the gerund form to express the dynamism of community (Weick 1979). In essence, Anonymous existed for years before it achieved a somewhat stable consensus over a common purpose and shared identity reflected in claims of community by members and labeling by media of Anonymous as a community (Becker 1997). Media audiences that sought to understand and categorize them often failed to do so, often describing Anonymous as so fast-paced that it defied categorization. In fact, although media observers

reported that they understood the underlying structure of Anonymous, the tools used by Anonymous, the pathways to participation available, and the participants and types of projects that characterized the community changed. All told, with a membership clamoring for novelty and with innovation in methods and technologies as part of an evolving identity, attempts at definition or formalization characteristic of consensus in extant case studies of community formation (see Davis and McAdam 2000) largely failed. It was only when users sought to resolve internal conflict through the creation of a civic participation gateway that allowed for the coexistence of hacktivists and traditional activists, that a form of operative truce necessary for the building of consensus became realistic. In essence, the community that lost unity of purpose through the influx of newcomers and the influence of external audiences (i.e., media, supporters) was able to support member coexistence by using technology. The purpose of the community became the support of disparate causes, the incubation of new ideas and the celebration of the diversity within Anonymous. This purpose stands far from those of the typical movement, which seeks to create specific social change (Morris 1986) rather than create an engine for change that suits multiple audiences. Formalization in practices and norms did not require alignment in agenda, only agreement over the importance of the interaction or relational space (Kellog et al. 2006) accommodating pluralism. This echoes findings by Jones et al. (2011) regarding how architects with different aesthetic visions and philosophies were able to coexist and support the profession by adopting a "big tent" version of modernism. That is, community can be built by actors with heterogeneous agendas who develop norms of respect for diversity. Although Jones et al. (2011) describe an expansion of what stylistic variations and materials could be considered modernism over time, a feat achieved through discourse, I find that technology (i.e., in the form of a programmed in platform for user interaction) allowed for harmony between clashing factions.

Unlike Tonnies' seemingly insurmountable conflict between Gemeinschaft and Gesellschaft, the particularistic needs of individual actors and the universalistic ideals of community were fulfilled in the Anonymous "gateway" iteration seen in Period 4. Instead of being built on a common interest, the

community was sustained by a shared interaction space and attachment to the Anonymous collective identity. So, although scholars draw on Jochen Gläser's (2001) definition of community as, "a voluntary collection of actors whose interests overlap and whose actions are partially influenced by this perception" it is perhaps not necessary for interests to overlap for community to exist. In fact, in the case of Anonymous, we see a community where individuals can freely pursue different interests as long as they respect the rights of other members to pursue their own interests. In that sense, in its latest iteration, Anonymous is more akin to a Gemeinschaft village where residents pursue their individualistic interests but recognize their shared identity (Pratt 2003, Poletta 2001). This feeling of shared identity is made possible through technology and the creation of online free spaces (Poletta 1999) and the building of a collective identity (Melucci 1996) where users engaged in different pursuits can share their exploits and learn from the experiences of others. It is perhaps more useful, therefore, to focus on community as being different from networks or collective because individuals within the community attend to and identify with communitarian objectives rather than their own pursuits.

The way in which Anonymous was able to grow and organize itself also supported the pursuits of multiple interests, while maintaining a sense of shared community. Branches of Anonymous would often split from the central core, seeding new initiatives, but the Anonymous moniker remained for those spin-offs. Fuzzy delimitation of boundaries between Anonymous and spinoffs makes the notion of new form diffusion difficult to grasp. Certain practices such as the lack of personal identifiers and the maintenance of porous boundaries became defining characteristics, making Anonymous forums identifiable to outsiders and open to their influence. The diffusion and easy access to memes and symbols made it easy for anyone to claim to be part of Anonymous. Rao, Morrill and Zald suggest that new forms of organization emerge when "spin-off movements customize the master logic driving an initiator movement to a new locale." (2000: 264). In this case, practices derived from a hacker ethic and the pursuit of lulz allowed users to claim the Anonymous moniker without formalized socialization mechanisms. The project-driven nature of Anonymous activism meant that there were technically no spin-offs – only new

projects. Because the community didn't have a formal leadership structure or bureaucratic constraints on differentiation, the need to "spin off" or distance one's initiative from a leadership core was essentially eliminated. These differences meant that the community could not be bound by common interests – these were fickle and subject to the whims of mobs that entered and exited Anonymous spaces. Instead, Anonymous was organized via technology around unique spaces and a collective identity based on an empty signifier: Anonymous.

Much like a city that grows organically, adapting itself to the needs of its citizenry, the Anonymous community grew without formal guidance or plan and through the creative use of existing technologies. As such, the community could be easily re-imagined symbolically (Cohen 1985) and organizationally (Seidel and Stewart 2011). Anonymous has a shared ethic of interdependent contribution maintained through free interaction spaces, some formalized set of norms for coordinating activities driven by an evolving repertoire of coordinating practices, and some sort of social identity based on an identifier that is constantly being reinvented (Heckscher and Adler, 2006, p.2). In doing so, Anonymous represents one of the few examples of a "collaborative community" form that is neither Gemeinschaft nor Gesellschaft but a dialectical synthesis of these opposites. As such, it transcends many of the debates that have plagued studies of communities - tradition vs. freedom, of Gemeinschaft vs. Gesellschaft, universalism vs. particularism, - because it allows for a shared sense of community while being populated by unlikely contributors that embody the "networked individualist" (Wellman et al. 2003). Importantly, the case of Anonymous sheds light the construct of purpose itself; it reveals that even though some purpose exists in exclusion or negation of competing purposes, language and expanding vocabularies (Jones et al. 2011) as well as technology (as shown here) can support pluralism and tolerance as purposes onto themselves.

Understanding Purposeful Community Action in Online Environments

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Key dimensions of online environments described in Chapter 2 of this dissertation, determine how the actions taken by a community and the steps in its development can be different in online environments. The creation of series of "*locations*" or free spaces (Poletta 1999) where users felt safe, led to experimentation which enabled new community purposes. The influx of under-socialized newcomers through porous *boundaries* during Project Chanology changes the direction of the community, making their tactics and rhetoric more conventional and determining who determined purpose. The fast-pace of *interactions* made rapid pivots in community direction possible, allowing Anonymous to be both highly adaptive to external demands and threats but also unpredictable to observers and to Anons themselves. Finally, *identities*, or the absence of personal identities in particular, played an important role in shaping not only how the community saw itself, but what activities it could and could not engage in. Anonymous was an amorphous legion of users whose very purpose was to negate the stability of personal identities and embrace one's freedom to express oneself freely. My examination of the influence of these dimensions set the stage for scholars to re-conceptualize community mobilization and activism. I elaborate on these contributions below:

Free Spaces as Cultural Laboratories and Digital Platforms. Putnam (2000, chapter 12) and Brint (2001), among others, speak to the importance of physical space, advocating the creation of "well-traveled paths and common meeting places" that will provide "opportunities for interaction" (Brint 2001:19). Studies of community-driven movements such as Morris' (1986) detailed history of the American Civil Rights Movement, placed great emphasis on the importance of tangible symbols and locations to the advancement of a cause. Sit-ins, street protests and church meetings all derived power from the locations which contextualized and helped make "real" the struggle of African Americans in the south. Studies of the French Revolution reference physical barricades in the streets and secret meetings away from the watchful eyes of the elite.

Anonymous contributors benefited from the creation and maintenance of a free "space" (Poletta 1999) which in many ways served similar function to the churches and underground meeting places described in extant studies of collective actors or the "relational spaces" described by Kellog and colleagues (2006) in their study of hospitals. Initially, the /b image board on 4chan allowed for relative isolation from the "rules" that constricted deviant modes of expression in real life. It was, in essence, a place where novelty and shock value, in preference tied together, were valued, a defacto playground without supervision. Contributors played with ideas, creating memes, planning raids and building common norms and values that would influence the trajectory of the Anonymous community as it grew increasingly interested in effecting social change. It was, as such, a "cultural laboratory" (Melucci 1996) that existed online rather than in physical space.

The malleability of the online environment and the ability to alter the environment on a whim, made this experiment very dynamic and frustrating for novice users that would find the interface through which they interacted with users constantly changing. These changes were also possible because organizing online required so few capital resources. When these changes spilled into the IRC channels, users would find the roles they played in projects changed not by the requests of project operators but by changes to the interface. This dynamic reflects Barley's notion that social patterns change when "materially induced changes in the non-relational aspects of roles spill over into the corresponding system of role changes" (1990: 99). These micro-social changes would ultimately impact the community as a whole as the rippling effect would cause users to react and create their own changes to the environment and adapt in diverse ways.

The IRC network space also served a fascinating function, allowing users a diversity of choices for when and how to participate as well as a way for users to structure and understand where contributions were needed. By providing users with the current number of contributors in a particular channel, the software allowed users to see which topics were trending. This left them with a key decision: did they want to participate in a hot topic or to help revive a project that was just beginning or was no longer

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receiving attention. In short, with every action users would vote on where the community was headed and which targets and projects were appealing.

A better understanding of online "space" informs theory not only by helping scholars understand the role that "location" or "spatiality" plays when physical space is not present but provides a rich metaphor for understanding how community can be imagined symbolically in online environments (Cohen 1985). In short, the notion of an online free space provides a theoretical foundation on which scholars can build explanations for why some communities are able to create social change or develop unique collective identities and why some fail to do so. The characteristics of the space where community formation or organizing takes places will leave a lasting imprint on members and on communities that follow. Notably, I argue here that setting or spatiality matters in any study of community forms.

Online Boundaries as Subjective and Porous. In agrarian communities and villages boundaries were markers of inclusion or exclusion defined, in part, by their stability and their importance in maintaining physical, symbolic and social separation (Effrat 1974). They allowed actors to "categorize objects, people, practices, and even time and space" (Lamont and Molnar 2002: 168) with relative ease.

Anonymous reveals very different social and symbolic boundaries (Lamont and Molnar 2002) from the well-delineated boundaries of *Gemeinschaft* communities. Rather than committing to Anonymous full time, most users of the community made micro-contributions and jumped to other communities online or offline (Wellman et al. 2003). Anonymous community boundaries were permeable – individuals would join together for a project and disperse often, contributing as much or as little as they would like.

The nature of Anonymous' boundaries influenced the purpose and related goals adopted by community users. First, the porous nature of community boundaries made changes in purpose sudden and unpredictable. An influx of users could enter and exit the community at will and there was little that could be used to distinguish longtime contributors from newcomers. Second, boundaries were understood differently across the community. Although some members had a very clear idea of what the norms and

values of the community were and what behaviors were acceptable others were not sufficiently socialized to understand the underlying value of the Troll, Hacker or the burgeoning Anonymous culture.

Importantly, a better understanding not only how and why online boundaries – whether symbolic or not – shift and how these shifts influence the adoption of collective purpose allows scholars to determine whether changes in what is considered appropriate, how users navigate to and from the community and how the level of contributions can be an indicator of certain community dynamics. Ultimately, boundaries help us understand our social reality, independent of whether that reality is real or imagined. I contribute to extant scholarship by linking these boundaries to key processes on online community formation and community engagement in collective action that have not been challenged since their introduction several decades ago (Zald and Ash 1966).

Interactions as Ephemeral and Distant. In the beginning of this dissertation, I mention that communications-related developments have greatly influences the nature of interactions and that the advent of the Internet has made interaction feel even more ephemeral and distant. The Anonymous case provides an instance in which the nature of interactions produced important outcomes for community development. First, the ephemerality (Bernstein et al 2011) of interactions in 4chan and other community spaces made it difficult for a single user to keep track of all events and for all community members to access the same information. As such, it wasn't only the space of interconnection between users that is increased via online interaction but the speed at which these interactions happen. Second, interactions in Anonymous were distant not only because users were located remotely but because one wasn't able to maintain contact for long. Marshall McLuhan (1974) coined the term 'the global village' to explain how electronic media (radio and television in his time) made experiences more simultaneous and interactions more immediate, leading to a sense that someone across the world is more accessible and, for many purposes, "closer". The Internet added greater interactivity and accessibility to this village and further enhanced a sense of co-location. However, McLuhan doesn't account for variations in community forms

within the Internet. In Anonymous, interactions were simultaneous and immediate but also ephemeral and distant, making the deep interaction necessary for the discourse over common purpose to take place difficult. That is, superficiality born of distance and ephemerality made the community necessarily devoid of meaningful conversation. Purpose, therefore, became a product of accumulated snippets of conversation and unexamined comments. Those comments which were more attended to became the determinative of purpose, challenging again the notion that purpose is achieved by consensus (Rao 1998).

Another key finding that is central to the understanding of a community's development of purpose relates to interactions with external audiences. Most studies conceptualize audiences as being distinct from members of communities. Audiences observe and report, react and label. Studies of social movements rarely show audiences, particularly media, entering into the fray of argument and taking sides (Ryan, 1991). In the Anonymous case, the distinction between audience comments and the comments of self-identified members were largely indistinguishable. As such, the boundary between community and those outside of it became fuzzy. The lack of personal identifiers and boundaries led to the creation of an interaction space where interactions weren't only fast-paced but which lacked personal accountability. Purpose arose, therefore, from a mélange of audience comments and the internal wrangling of unknown participants.

Anonymous Identifiers and Empty Collective Identifier. Perhaps the most distinctive characteristic of the Anonymous community is its relationship with and use of identity. Most prominent is notion that individual can organize without using their proper names or distinct pseudonyms. That is, personal identifiers are completely anonymized, producing a sense of deindividuation (LeBon 1947/1895, Pratt 2003), where individuals enter an agentic state where they begin to act as if they are tools of a larger collective consciousness. Another feature is that the collective identifier of the group is itself an empty signifier – Anonymous – meaning without identity. The community rejects personal identity as necessary to organizing, thereby challenging widely held notions that reputation (Chang 1992) and the

accountability that results from its accrual is necessary for the building of community and for coordinated actions. That is, they are divorced from concerns about their individual reputation (which is anonymous) and more concerned with how the collective is perceived and understood. Although personal anonymity allows them relative freedom to act crudely and with impunity within the community, whenever they use the Anonymous collective moniker in extremal audience facing capacities they are representing a community they care about and don't want to see disparaged. As I show in Chapter 4, this aversion to "mislabeling" or reputation accrual at the collective level produces a shift in how contributors behave and almost leads to the dissolution of the community.

These dimensions influence not only the trajectory of community life but each other. The lack of personal identifiers impedes the formation of interpersonal trust. The formation of free spaces allows the formation of culture without interpersonal relationships and roles. Importantly, the limit of this influence remains understudied and the dimensions outlined here are far from comprehensive.

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Coordination: Organizing the Anti-Bureaucracy

The Anonymous community faced several challenges when it came time to coordinate complex hacker attacks on increasingly sophisticated targets. First, the idea of top-down direction from formal leader was anathema to a community that was staunchly against glory-claiming and hierarchy. Second, the lack of personal identifiers which reinforced this anti-authoritarian penchant meant that the creation of long-term relationship and the formation of routines between individuals would be near impossible. Finally, the structure of Anonymous was constantly changing because of ongoing experimentation with how to structure collective action on the Internet and the need to stay one step ahead of the authorities.

To counter these challenges, Anonymous adopted several coordination practices. These practices enabled activities to be coordinated without sacrificing ideals held dearly by the community. While coordination practices have been described in extant research, the practices described here add to extant conceptualizations because they don't rely on proximity, i.e. co-location, or the use of stable identifiers. In essence, I show that coordination of complex actions is possible without the accrual of reputation or even the need to know another contributor's name. Because no personal identifiers allow for the building of trust, trust is made less useful through the creation of a programmed platform that both limits and enables action. Operators of IRC channels trust that individual contributors will be forthright with how capable they are to execute a task assigned to them. Because of the lack of reputation, there is little individual accountability but also no reason not to ask questions or ask for help. Nobody would be able to exclude you from further contribution because of past performance or because you are not knowledgeable enough. This has two effects: it creates issues with execution when under-qualified individuals claim to be able to complete complex tasks but it also allows those individuals to receive help from other forum contributors and quickly engage in "on the job" learning of skills which they can teach others.

By tracing the fine-grained development of coordination practices longitudinally this research builds on the work of those that have examined coordination in mature communities and projects. It builds understanding of the process of how coordination practices evolve and become more sophisticated over time. Importantly, I find that purpose and coordination were deeply interconnected through the tools and boundary objects used by Anonymous. As the community's goals grew more sophisticated so did the tools they used and the attention they had to pay to coordination demands of projects. At the same time, as their growing ability to coordinate complex activities allowed for more complex missions, it also allowed for the consideration of new purposes (e.g. support of external groups, creation of the IRC networks as a one-stop-shop for participation).

Limitations and Future Research

My analysis of the Anonymous online community's transitions in purpose and coordination of collective action in an online environment enabled the identification of possible research opportunities in several theoretical streams. A few limitations of the context, the methods used to study Anonymous, and the nature of Anonymous itself could, however, be addressed by future research. Although ethnographic observation of online interactions proved informative and were sufficient to address the research questions posed in the study, direct interviews with contributors to Anonymous, creators of the platforms in which Anonymous interacted, media experts and observers as well as law enforcement could have conceivably led to greater insight into fine-grained information concerning how the community evolved over time as well as more insight into the motives of various external audiences. Also, the limited scope of time of the study, while extensive by ethnography standards, did not capture the conclusion of the Anonymous story – the community continues to innovate and change, generating new coordination practices and purpose.

The fact that this dissertation focuses on a single community, while advantageous in terms of how fine grained findings have proved to be, could be expanded in scope. Researchers in the future would do well to engage in studies of populations of online communities, tracing the ebb and flow of in-use practices as well as changes in key dimensions such as boundaries, composition and size. By doing so, scholars might be able to ascertain which dimensions are worthy of even greater attention, given their influence or discrepant behavior vis-à-vis existing research. In particular, this dissertation is focused on the transition from recreation to activism or, referring back to Figure 2.1, from a community that is oppositional yet internally-focused to one that is externally focused and oppositional. It would be interesting and likely lead to greater insight into how transitions in purpose take place, if scholars explored other transitions within this same framework. For example, scholars might examine how

communities that are externally-focused turn inwards and become less engaged in activism. Moreover, studies could isolate and compare how key dimensions of online environments – spatiality, boundaries, interactions and identities – create inertia for changes in purpose rather than accelerate or enable change.

Other opportunities for future research than don't stem from limitations of this research abound. My elaboration of key dimensions of community and how they differ online can build on extant work that has reviewed the community construct (e.g., Brint 2001) and examined the involvement of communities in collective action (e.g., Calhoun 1991). By claiming that online collective action is qualitatively across several dimensions rather than simply claiming that online interactions are cheaper or quicker, I build support for the work of previous scholars (e.g. O'Mahony 2003) that identify the online community as a unique form of organization. Other scholars could continue this work by providing additional dimensions that provide unique insight into how the form functions differently or add depth to these dimensions by conducting studies that compare how these dimensions vary in terms of their effect on communities that serve different purposes (e.g. more commercially-oriented communities or communities that are formed by formal organizations).

Future research might focus on the role of spectacular activities in collective action. Spectacle has played an increasing role in mobilizing adherents and igniting involvement in social protest (Duncombe, 2007). This study casts doubt on the assertion that actors might "gain legitimacy from their peers...by first violating the norms held by their peers" and that "in order to persuade people to like you, your group, or your organization, you might start by taking action designed to offend those people" (Elsbach and Sutton, 1992: 733) by suggesting that while offensive actions, particularly spectacular ones, can help attract attention, garnering the "right kind" of attention may be important. While Anonymous' use of illegal tactics (Tilly, 1978) attracted attention and new members and the media, increased attention brought with it high expectations for continued. As Ryan (1991) proposes, exposure to media, that demanded Anonymous generate spectacle and conform to laws, created expectations for Anonymous that led it to change the way it behaved, leading, at least in part, the collective to transition to a more

contained repertoire of contention. Anonymous found itself facing a double-edged sword: if they used spectacular and unconventional tactics, they attract attention and new members but end up setting themselves up for failure; if they neglected spectacle they might have been unable to draw attention and support for their cause. This finding reflects Meyer and Lupo's (2007) admonition that collectives can build stable and highly functional organizations that conform to the expectations of the establishment or they can "abjure formal organization, stoke mobilization, recognizing that their disruption will be short-lived and unlikely to lead to substantial reform" (Meyer and Lupo, 2007: 117). Studies can also continue work on the use of anonymity, unconventional tactics and spectacle to determine under what circumstances they positively impact movement outcomes and when they become a liability. Ultimately, however, more case studies of collective action transitions and related processes are needed to help provide a more complete understanding of how to embroil "unorganized, autonomous and dispersed populations into common and sustained action" (Tarrow 1994, p. 9).

I have examined how and online community transitions into activism, shifting purposes and adopting different coordination practices. It would be interesting to examine when and when online communities are unable to coordinate actions. In short, failure cases would help researchers better understand why some communities grow to become influential and popular while others demobilize and gain less user interest across time. By contrasting stable communities with those that fall apart greater insight into the nuances of online coordination could be gained.

Additional research on the connection between online communities and the organizations and institutions with which it interacts are also needed. While extant studies have examined how collective action driven by online community affects organizations (e.g. O'Mahony 2003), research on the link between the two forms remains limited, particularly when examining how firms affect communities. Moreover, while we know how firms are shaped by institutions, the way in which institutions and extant logics shape online communities remains underspecified. In short, examining the interactions between

free forming online communities and established institutions may prove to be fruitful grounds for future study as it is this nexus that may best inform the emergence of new forms of organizing.

Conclusion

Online communities have become pervasive, increasingly sophisticated and culturally rich platforms for interaction (Wellman et al. 2003) that impact how individuals engage in collective action by upending many of the constraints that have belied traditional, bureaucratic organizations in the past. For over a decade, online communities have had the distinction of being the fastest growing category of Internet-based phenomena (as reported in Wilson and Peterson 2002, Wingfield and Hanrahan 1999, Earl and Kimport 2011), becoming the source and discussion platform for "things that matter" to contributors (Wenger 1999) within and outside online circumscriptions. This research advances discussions of how online environments effect organizational processes and incites the creation of new forms, with implications for collective action and coordination theories. It shows the how unconventional contexts can and have in the past been a great source for theoretical advancement. As Bamberger and Pratt (2010: 665) suggest "we should remind ourselves that some of the most significant contributions…emerged from what might best be labeled "unconventional" organizational research: research where either

or both the sample and the context are unusual by today's norms." I hope that this research, once published, can build on the work of other that seek to propel the study of unconventional contexts and forms in the search for new solutions to social problems (cf. Rao 1998).

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TABLES AND FIGURES

Table 2.1 Selection of Definitions of "Community" in Sociology and Community Studie

Author(s)	Date	Definition
Tönnies, Ferdinand	1887	"All trustful, intimate and exclusive life together (we find) is understood as life in community. Society is the public sphere, the world. One is bound to community with one's ilk from birth, with all the benefits and drawbacks. One goes into society as though one is going abroad" (1887/1979).
Durkheim, Emile	1911	"the sharing of place, rules of conduct and a common compliance to rituals and interdictions that defineinternal bonds of solidarity." (1911/1965)
Hillery Jr., George	1955	"Persons in social interaction within a geographic area and having one or more additional common ties"
Mercer, Blaine	1956	"A functionally related aggregate of people who live in a particular geographic locality at a particular time, share a common culture, are arranged in a social structure, and exhibit an awareness of their uniqueness and separateness as a group. (p. 27)
Freilich, Morris	1963	"People in relatively high frequency interaction, exchanging information at a set of related centers, and practicing and developing local interaction culture based on past information shared" (p. 127)
Cohen, Anthony P.	1985	"A symbolically constructed system of values, norms and moral codes which provides its members with a sense of belonging within a bounded whole"
Hecht et al.	1993	"a grouping of persons whose commonality is derived from shared identity and setting a sense of membership stems from shared symbol use, meanings, norms, prescriptions, and history" (p. 29-30)
Etzioni, Amitai	1996	"A web of affect-laden relationships and a measure of commitment to shared, values norms and meaning, and a shared history and identity" (p.127)
Brint, Steven	2001	"aggregates of people who share common activities and/or beliefs and who are bound together principally by relations of affect, loyalty, common values, and/or personal concern" (p. 8)
Gläser, Jochen	2001	"an actor constellation that consists of individuals who perceive that they have something in common with others, and whose actions and interactions are at least partially influenced by this perception" (p. 6)
Wellman, Barry	2001	" networks of interpersonal ties that provide sociability, support, information, a sense of belonging, and social identity" (p. 2)
Block, Peter	2008	"a place - geographically bound - where people are physically connected and have an enormous incentive to pursue a common interest."
O'Mahony and Lakhani	2011	"a voluntary collection of actors whose interests overlap and whose actions are partially influenced by this perception."

Dimension	Face-to-Face (Offline)	Internet-based (Online)
Locations <i>Geographic location of the</i> <i>community or relative</i> <i>location of members</i>	Ties are bound to place, which influences rituals, boundaries, etc. (e.g. neighborhoods); some become dispersed over time (e.g. Romani, Jewish Diaspora)	Social media and other tech. allow users to maintain contact and create community with a large network of acquaintances, kin, friends and colleagues independent of geographic distance (e.g. O'Neill 2009, Facebook)
Boundaries Delineations that separate members from external actors/influence and that divides the community itself	Involve commonality and inclusion, but also contrast and exclusion. Non-members are excluded via symbolic and social boundaries that may complement physical boundaries.	Difficult to regulate, porous, non-physical boundaries allow members to operate in a number of specialized online communities that rarely grab their undivided attention. (e.g. Nardi 1999, game worlds)
Interactions Nature of between-member and member-outsider communications	Interactions between members vary in intensity with the demands of each particular community and are typically synchronous (i.e. take place in real-time). Interactions with external audiences can be limited by physical distance.	Individuals are free to devote as little or as much time to community activities through synchronous or asynchronous contributions. Contributions can be highly involved or "micro" (e.g. Benkler 2006, distributed proofreading). Isolation from external audiences is difficult given ubiquity of Internet.
Identities the names or pseudonyms used by individuals to make themselves recognizable to others	Personal identifiers are often given names and titles. Collective forms of identity take shape over time further integrating the individual into community life.	Use of pseudonyms and anonymity is typical as contributors adhere to norms of different online environments rather than a single community. Identification with a community born out of inhabiting pseudonym/avatar that exists within a community.

Table 2.2 Key Dimensions differentiating Online and Offline Communities*

* Note: Although there are communities that exist solely online and communities that exist solely offline, many communities straddle both. The categories presented here are analytically useful archetypes that are, in many cases, not representative of the full spectrum of community forms in existence.

TYPE(s)	EXAMPLE(S)
Discussion and Image	4chan (/b forum), Something Awful, YTMND, Newgrounds,
Boards	1024chan, 4/chan
IRC Networks	Anonet, AnonOps
Twitter Feeds	@AnonymousIRC, @AnonCircle, @AnonymousPress, @YourAnonNews, @AnonOps
Video-sharing Websites	YOUTUBE.COM – OpsAnonymous, TheAnonMessage, Church0fScientology, Xen0nymous, Anonymou04210 VIMEO – Zhent, TheDonzerlyLight, XenuTV, Nolanon, Sic Transit, Epic Swordguy, 3rdman, Angry Dwarf, Anon1mous, On3, Anon Sparrow, David Mudkips, JN10101, Anon Seatac
News and Wiki Sites	http://anonnews.org, encyclopediadramatica.com, Anonwiki, Anonymous_group, Xenu-Directory.net, Anonleaks.ch, http://anonywebz.com/
Local Groups	Boston (non.violentuprising.com), Los Angeles (socalanon.com/), San Francisco (anonsf.ning.com/), New York City (nycanon.org/), Philadelphia (phillyanon.ning.com/)
Other Websites	Partyvan.info;; en.wikinews.org; whyweprotest.net; www.somethingawful.com

 Table 3.1 Abridged list of Anonymous Websites observed for ethnography

DATE	DESCRIPTION	
Oct. 2003	4chan.org website founded by Christopher Poole and colleagues	
Jun. 2006	Raid of Habbo Hotel - a social networking site designed as a virtual hotel	
Dec. 2006	Raid on website of white supremacist blogger Hal Turner	
Dec. 2007	Anonymous members provide police with evidence leading to the arrest of alleged Internet child predator Chris Forcand	Begin ethnography
Jan. 2008	Project Chanology – raids and protests against the practices of the Church of Scientology]
Mar. 2008	Hack of the support forum for the Epilepsy Foundation of America	
Jun. 2008	Defacement of SOHH (Support Online HipHop) and AllHipHop websites	
Jan. 2009	Anonymous leaks personal information of the president of the No Cussing Club – an anti-profanity website	
Jun. 2009	Anonymous, The Pirate Bay and Iranian hackers launch support site for Iranian Green Movement which sought to allow uncensored communication and exchange of resources.	
Sep. 2009	Operation Digeridie – attack on Australian government sites to protest blocked access to imageboards and censorship at the ISP (Internet Service Provider) level	
Feb. 2010	Operation Titstorm – attacks on Australian government websites in protest of Internet filtering legislation	
Jul. 2010	Oregon Tea Party Raid – attack on Oregon Tea Party following their usage of an Anonymous slogan	
Sept. 2010	Operations Payback – Denial of Service attacks against Airplex software, a company hired by several Bollywood producers to attack sites that did not respond to copyrighted material takedown notices.	
Dec. 2010	Operation Payback (Wikileaks) / Operation Avenge Assange – launched attacks against Amazon, PayPal, Mastercard and Visa for their refusal to process donations in support of the Wikileaks initiative.	
July 2010	Operation Bradical - threat to disrupt Quantico communication because of alleged mistreatment of suspected leaker Bradley Manning.	
Jan. 2011	Operation Leakspin – sorting through recent WikiLeaks releases to identify and raise awareness of potentially important and previously overlooked cables	
Jan. 2011	Attacks on Zimbabwe government website after the president's wife Grace Mugabe sued a Zimbabwean newspaper over its reporting of a cable released by Wikileaks that claimed she had made "tremendous profits" from the country's diamond mines.	
Feb. 2011	Attack on right-leaning Irish political party Fine Gael following allegations of censorship of Wikileak information	
Jan. 2011	OpTunisia - Attack on Tunisian government sites to highlight youth unemployment in the country as well as net and press censorship.	
Feb. 2011	OpEgypt - government websites, along with the website of the ruling National Democratic Party, are hacked into and taken offline by Anonymous. The sites remain offline until Mubarak steps down.	

Table 3.2 Timeline of Anonymous Projects and Raids

		P1 Oct. 2003 – Dec. 2007	P2 Jan. 2008	P3 Feb. 2008 – May 2009	P4 Jun. 2009 – Feb. 2011
Locations	Online	Creation of 4chan free space allowed users to seek out fun without moderation	Calls for participation placed in external forums led to expansion beyond 4chan space to new forums	Users aggregate on 4chan and other online forums, leading to less socialization of new contributors	Creation of a new multi- channel space allowed for simultaneous projects / plural purposes
	Physical	Anonymous interaction exclusively in or	s and activities took place nline environments	Users engage in physical protests that were organized online and executed offline	Physical presence continues for some traditional activism projects but most are online
	Normative (Symbolic)	Norms shaped by cyber- constrain behaviors (e.	libertarianism /hacker ethic g., "NYPA", "moral fag")	Lack of enforcement of "lurking" norms enable under-socialization	Norms of acceptance of diversity of purpose become prevalent, attenuating conflict
Boundaries	Linguistic (Symbolic)	Formation of argot make from others, creating lear	Anon community distinctive ning curve for participation	Use of argot supplanted by participation of newcomers using standard English	Importance of argot diminished as technical boundaries created
	Technical	Immediate access to site v (e.g., password	with no technical boundaries s) to participation	Limited technical boundaries to participation enabled cooptation by newcomers	Less intuitive/simple access to IRC channels limits entry into channels to tech savvy users
Interactions	Internal	Ephemeral interactions enable rapid-fire exchanges of lewd content, attracting users	Community support builds following internal calls to dismantle CoS	Forum discussions include newcomers and lead to acquiescence to demands for tempering tactics	Discussions take place within channels constrained by topic
	External	Limited brief "raids" and simple pranks on unsuspecting <i>targets</i>	Mobilized <i>supportive online</i> <i>communities</i> into action, marking first positive engagement with outsiders	Negative <i>bystander</i> and <i>media</i> comments lead to tempering of Anon tactics eventually leading to user disengagement	Media and bystanders seem to have more limited influence / community supports allies (e.g., Wikileaks)
	Personal	Lack of personal iden	tifiers meant no idiosyncratic ch participation witho	naracteristics known to other users (e. ut personal reputation concerns	g., demographics), enabling
Identities	Social	Users adopt collective iden identity in on	tifier "Anonymous" as social line interactions	Users label newcomers as "new fags" and themselves "old fags" producing distinct categories, emphasizing factionalization	Distinctions between old and new dropped with creation of IRC network as contributor testing is put in place
	Collective	Users see the community as pranksters (Coleman 2010) devoted to the pursuit of recreation	Prankster identity stretched to include external focus, leading to adoption of hacktivist collective identity	Split between old and new guard as founding users assert prankster/hacker identities, reject traditional activist	Collective identity expanded to encompass prankster, hacker and activist, attenuating conflict

Tab	le 4	4.1	D	ifferen	tlv	v instantiat	ed	dimension	s of	online	community	v d	riving	g the	transition	process
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Coordinating Practice	Integrating Condition(s) Engendered	Period 1	Period 2	Period 3	Period 4
Continuous Dialoguing Incessant conversation between individuals involved in accomplishing a task	Allows users to be reachable immediately when online making them accountable (despite anonymity) and enabling greater adaptability	X asynchronous	Х	X synchronous	Х
Multimedia Representing Use of images/video to convey task and contextual information	Creates a reference point from which all users, independent of background or sophistication, can achieve common understanding and leading to more predictable task outcomes	X Detailed	X Pamphlet	X Banner	X Color-coded post
Contributor Testing Peer Verification of task, content and technical user knowledge	Hold users accountable for a minimum level of knowledge necessary for task completion.		Х	Х	Х
Transparent Documenting Record project information for reference or posterity	Generates accountability for project outcomes while enabling common understanding by creating easily accessible compendia of norms		Х	Х	Х
Real-time, Global Updating Provide current information to entire community simultaneous	Timely understanding of events by entire community ensures common understanding and enables adaptability through rapid pivots			Х	Х
Interaction Monitoring Verification of quality of forum/channel communications	Ability by all users to observe ongoing interactions increases predictability of activities and greater adaptability and accountability through operator intervention			Х	Х
Simulated Practicing Attempt an activity prior to engagement to improve/maintain proficiency	Engagement in simulated activities preempts unexpected outcomes engendering predictability and common understanding of project parameters				Х

Table 5.1 Integrating Conditions Engendered by Coordinating Practices across Periods

Period	Project	Continuous Dialoguing	Multimedia Representing	Contributor Testing	Transparent Documenting	Global Updating	Interaction Monitoring	Simulated Practicing	Fail or Success
Period 1	Habbo Hotel Raids	1	1						Success
Oct 2003	Hal Turner site Raid	✓	1						Success
Dec 2007	Chris Forcand Hack	1	✓						Success
Period 2 Jan 2008	Project Chanology	1	1	1	1				Mixed
	Project Chan. Street	✓	1		✓	1	1		Success
Period 3	Epilepsy Found. Hack	✓	1						Success
Feb 2008	SOHH Defacement	✓	1			1			Success
May2009	No Cussing Club Hack	✓							Success
	Raid Mormon Church	✓							Fail
	Iranian Support	✓	1					\checkmark	Success
	Op. Digeridie	1	✓		✓	1	✓	1	Success
	Op. Titstorm	1	1		✓	1	1	1	Success
	Oregon Tea Party Raid	1	✓	1	1	1	✓	✓	Success
D · 14	Op. PayBack	1	✓	1	\checkmark	1	✓	✓	Success
Period 4 Jun 2009	Op. Amazon Payback	1	✓			1		✓	Fail
– Feb 2011	Op. Bradical	1	✓	1	\checkmark	1	1	1	Success
100 2011	Op. Leakspin	1	✓	1	\checkmark	1	✓	✓	Success
	Fine Gael Attacks	1	1						Success
	Op. Tunisia	1	1			1		✓	Success
	Op. Egypt	1	1			1		1	Success
	Op. Facebook	1	1						Fail

Table 5.2 Success or Failure of Projects using Coordinating Practices by Period*

* This analysis excludes projects that did not gather sufficient support in calls to arms/action

unity Contributors External	Actively engages in activities aimed at upholding the status quo or tradition (e.g., "Defense of Marriage" Interest groups, Chasin 2000)	Actively engages in activities aimed at disrupting the status quo or inciting social change (e.g., southern black churches and communities – Morris 1986)
Focus of Commu Internal	Focuses on actualization and development in line with the dominant social order (e.g., Formal dining at Cambridge – Dacin, Munir and Tracey 2010)	Focuses on actualization and development separate or isolated from dominant social order (e.g., Intentional communities / utopian communes, Kanter 1972)

Figure 2.1 Community Purposes: Focus of community contributors (y-axis) and attitude toward the dominant culture (x-axis)

Attitude toward Dominant Culture



*Time-coding by period indicated by numbers (1, 2, 3, 4) and source by letter (C for comments, M for media and F for field notes)

Figure 3.2 Abridged Qualitative Coding Overview (Chapter 5)



*Time-coding by period indicated by numbers (1, 2, 3, 4) and source by letter (C for comments, M for media and F for field notes)

Figure 4.1. Sequence of events in oppositional online community transition in purpose from internal to external focus



driving transitions in purpose



Figure 4.2 Trend of topics attended to in community interactions (n=1157 threads), Dec. 2007 – Feb. 2011¹⁹

¹⁹ This figure does not contain data prior to December 2007 because collection of this information could not be done retrospectively



Figure 4.3 Popularity in number of visits to interaction spaces (n=4.53 million visits) and media attention (n=178 articles), Dec. 2007 - Feb. 2011^{20}

²⁰ This figure does not contain data prior to December 2007 because collection of this information could not be done retrospectively



Figure 5.1 Visual Representations Introduced by Anonymous across periods

Figure 5.2 Online tool used to collectively plan Anonymous attack

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1		4	unna
2	Have anyone Thought about using freenet ?!	=	unna
4			unna unna
5	ANON OP ATTACK PLAN 12 DEC 3010		unna
7	We the anons of the world plan to attack		unna
8	Notice: This plan was written by atleast 31 Anons. 16 writers writing simultaneously		
10	GUIDELINES:		C0br4
11	The Anon consciousness can never be told by 1 person because very person is an individual. Therefore any person interviewed is a part of the bigger whole with his own opinions.		Coort
12	DO NOT ATTACK PRESS ! NEVER !Rawr :3		
13	0		
15	!!Attack only target from topic on IRC!!		button on th
16	By attacking something else you are just ruining operation!		ggtdgt: seer
17	We must act united to be SUPER effective, I'm SUPER serial!		are in secre
19	/NoMedia, NoPolice, No Democracy as targets/? Agree?Y Y YYYYYY		dossed?
20			ggfdgf: I thi
21	Format:		secret for n
22	@Site (Reason) ++ /pluses are something like rating of the idea/		December.
23	-Comments		Vi: buenas
24	Current target:		Chat

Appendix A: Abridged List of Anonymous Argot

4chan - A message board and image board on the Internet where people congregate to post various kinds of pictures, flash animations, and discuss things such as anime. It is the English version of the original Japanese board with a similar system: 2chan. (source: urbandictionary.com)

404 - Error returned when a server cannot find the requested page. Also used to describe someone or something that is missing or otherwise absent.

/b/ forum - 4chan forum reserved for random or miscellaneous comments.

/b/ tards – term used by posters to the /b/ forum of 4chan to describe themselves.

LULZ - Beginning as a plural variant of lol, Lulz was originally an exclamation but is now often used as a noun meaning interesting or funny internet content. Lol -> lul; lols -> luls; lolz -> lulz. Lulz is the one good reason to do anything, from trolling to rape. After every action taken, you must make the epilogic dubious disclaimer: "I did it for the lulz". This has been pioneered by encyclopedia dramatica, famous for posting a fake craigslist add and then listing the personal info of those who responded. (source: urbandictionary.com)

Internet Hate Machine – is a term ironically used by Anonymous to name their "group". Although some people could use it as a serious claim towards Anonymous, many others commonly take it as a joke for the expression is supposed to embody everything concerning Anonymous' actions and the fact that they have a sadistic pleasure in tormenting others and/or corrupting things, then creating hatred on internet. First used by kttv reporter to describe Anonymous (source: knowyourmeme.com)

OP - acronym for Original Poster. The person who begins the selected thread in that particular forum.

New Fags - term used to describe new users to 4chan or other Anonymous forum sites

Old Fags - term used to describe established users of 4chan or other Anonymous forum sites

Lurker - someone who reads the messages in an Internet news group or forum without out responding or participating

Caps – screenshots of content

Meme - 1 : an idea, belief or belief system, or pattern of behavior that spreads throughout a culture either vertically by cultural inheritance (as by parents to children) or horizontally by cultural acquisition (as by peers, information media, and entertainment media) 2 : a pervasive thought or thought pattern that replicates itself via cultural means; a parasitic code, a virus of the mind especially contagious to children and the impressionable 3 : the fundamental unit of information, analogous to the gene in emerging evolutionary theory of culture - meme pool (n.) : all memes of a culture or individual - memetic (adj.) : relating to memes - memetics (n.) : the study of memes 4 : in blogspeak, an idea that is spread from blog to blog 5 : an internet information generator, especially of random or contentless information (Etymology : meme : derived from the Greek mimëma, 'something imitated', by Richard Dawkins in 1976) (source: urbandictionary.com)

Scilon - A follower of L. Ron Hubbard and the "Church" of Scientology. The term is a play on "Cylons," the robotic invaders in Battlestar Galactica.

Tripfags – Users in Anonymous forums that have usernames. Alternatively, *kotehan* in Japanese meaning "fixed handle"

Troll - one who posts a deliberately provocative message to a newsgroup or message board with the intention of causing maximum disruption and argument.

Rickroll – to "bait and switch" someone into clicking a link that takes one to a video playing Rick Astley's "Never Going to Give you Up." It is a basic prank played by 4chan users on each other and unsuspecting others.

WBM – acronym for Wise Beard Man, also known as Mark Bunker. WBM is a leading Scientology critic and runs XenuTV. (source: urbandictionary.com)