DIGITAL CONTENTION: COLLECTIVE ACTION DYNAMICS IN SOCIAL MOVEMENTS FOR INTERNET FREEDOM

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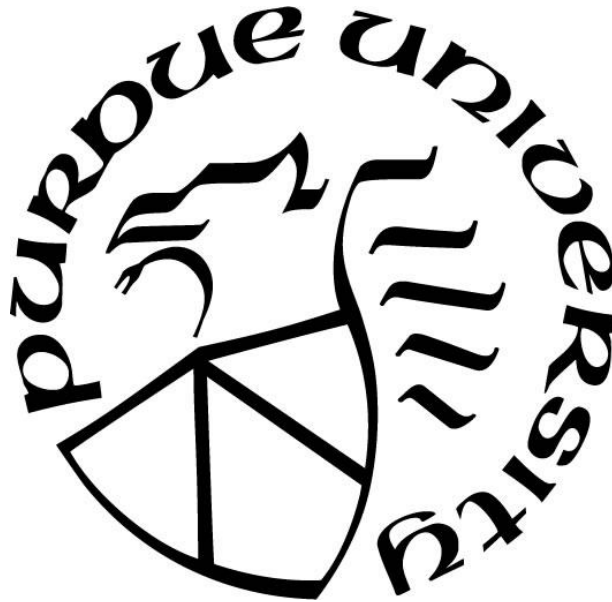**Jared M. Wright**

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Dedicated to my sister Jenna

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ABSTRACT

How does collective action operate in digital space, particularly for those social movements at the cutting edge of technologically innovative contentious politics? This dissertation analyzes activist (and hacktivist) groups engaged in what I call *digital contention* with state and corporate institutions over the future of Internet policy and governance, or what they see as "the freedom of the Internet." Based on case studies of the Digital Rights movement and the Anonymous hacktivist collective, I use a combination of computational and qualitative analyses of online texts, along with participant-observation at meetings and protest events, to explore how certain collective action dynamics are changing in digital space. Specifically, these include how movements internally perceive political opportunities and threats, as well as how they construct frames to communicate to external audiences. I find that: 1) Political opportunity is less important than threat for activists in digital contention, which is likely due to the lower costs of collective action; and 2) The digital divide and technological knowledge gap create a barrier to frame resonance which digital activists address either through "strategic inclusiveness" or "communities of anonymity," both of which encourage diversity among participants while also reifying other inequalities in different ways. These findings have significance for the study of social movements, communication and technology studies, and Internet policy. I argue that they portend changing dynamics that may ultimately affect all forms of collective action, and indeed the balance of power in whole societies, in the future as digital technology continues to spread into every facet of our lives.

CHAPTER 1: INTRODUCTION

Understanding the relationship between the Internet and activism has become a serious and rapidly developing area of study in the social and technical sciences. A great deal of recent research has focused on how a wide variety of contemporary mobilizations and social movements have leveraged various affordances of social media and other digital tools (Bennett and Segerberg 2013; Bennett, Segerberg, and Walker 2014; Earl and Kimport 2011; Gerbaudo 2012, 2014; Mattoni and Treré 2014; Tucker et al. 2016; Tufecki and Wilson 2012). To a large extent, this vein of work has "often adopted a narrowly instrumental view" of social media as mere tools (Gerbaudo and Treré 2015:867). Relatively few have considered this phenomenon by taking space into account, i.e., understanding not just digital tools but the whole digital realm as a space, with its own particular culture and structuring influence. Even fewer have examined the activists at the cutting edge of digital space, those who are using digital tools to fight for the rights and freedom of that very space while simultaneously operating within it. In other words, few have examined those activists most deeply embedded and at home in digital space, and thus most significantly affected by it. This dissertation embarks on new ground by asking, how are social movement activists who are leading the efforts to shape online digital space in turn being shaped by it?

The Internet is an invention that we perhaps still do not fully understand. What began in the late 1950s as a means of decentralized electronic communication has developed into a vast and ever-present outlet for human expression which has seemingly taken on a life of its own. Technology experts have described it as, "the largest experiment involving anarchy in history… the world's largest ungoverned space" (Schmidt and Cohen 2014:3). By 2007, more than 97% of global telecommunications were conducted through it (Hilbert and Lopez 2011). The

development of the Internet and related ICTs (information and communications technology) has become a major impetus for change in the modern world. On one hand, it has aided in economic expansion and the globalization of markets (Sassen 1999). On the other, it has empowered individuals at the grassroots level by connecting them to vast amounts of information as well as to each other in open forums, or "free spaces" (Castells 2008, 2015; Norris 2002). Some have even argued that it has helped create new space for a "transnational" (Guidry, Kennedy, and Zald 2000; Piper and Uhlin 2004) or "networked" (Shirky 2011; Tufekci 2017) public sphere.

Traditionally, the public sphere has been comprised of the physical spaces in which ordinary people can freely gather, discuss, organize, and participate in public politics. In many democratic societies today, protest has also become an increasingly institutionalized and accepted form of political participation. This phenomenon is known as the "social movement society" (Meyer and Tarrow 1998; Park and Einwohner 2019; Soule and Earl 2005). In this way, social movements have come to constitute an important part of the public sphere. According to Habermas ([1962] 1989), the public sphere is defined as follows:

> By "public sphere," we mean first of all a domain of our social life in which such a thing as public opinion can be formed. Access to the public sphere is open in principle to all citizens. A portion of the public sphere is constituted in every conversation in which private persons come together to form a public. They are then acting neither as business or professional people conducting their private affairs, nor as legal consociates subject to the legal regulations of a state bureaucracy and obligated to obedience. Citizens act as a public when they deal with matters of general interest without being subject to coercion; thus with the guarantee that they may assemble and unite freely, and express and publicize their opinions freely.

It has been argued by many that the key to a healthy democracy is active and informed citizens. The public sphere is crucial to in this regard as it is the "space" in which individuals, social movements, and non-governmental organizations (NGOs) can share and debate social ideas and policies (Evans and Boyte 1986). As Rheingold (2000:286) argues, "There is an intimate

connection between informal conversations, the kind that take place in communities and… in the coffee shops… and the ability of large social groups to govern themselves without monarchs or dictators." Historically, this connection has been forged both through private conversations between friends and colleagues in bars and cafes as well as among large groups of citizens through town halls and public squares. In ancient Greece, where democracy originated, the people created *agoras* which were literal spaces in public markets in which people would gather to converse, exchange rumors, and debate ideas of public importance.

The public sphere has always been vitally connected with physical spaces. But today, our public spaces have been disappearing; that is, they have become increasingly privatized, commodified, and policed (Sassen 2006). Many of what were once public spaces, such as marketplaces and town squares, have now turned into privately owned spaces, such as shopping malls, the owners of which can legally stifle free speech, dissent, and protest. For example, in December 2014 the Black Lives Matter movement organized a large, peaceful demonstration to protest the death of Jamar Clark in the Mall of America just outside of Minneapolis. However, the Mall's owners were able to take out restraining orders on three of the main organizers shortly before the event. They also called in riot police to expunge the demonstrators and locked down the Mall as soon as the event began, which were all within their legal rights (Brown 2016). Likewise, the 2020 wave of Black Lives Matter protests in cities across the US has shown an increased willingness of militarized police to respond violently to peaceful demonstrations in public spaces (Baumann 2020). Such restrictions, and the decline of public space in general, can be problematic for a healthy public sphere to thrive, and have arguably helped contribute to a growing number of people seeking new spaces for open public discourse and community in the online realm of digital space (Lim 2014). In turn, this digital space offers numerous new

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affordances for connectivity, and has further propelled the social movement society by enabling larger numbers of even more diverse claims and protests across the political spectrum (Earl and Kimport 2009).

More and more, though, the Internet has also become a contested space. In the digital age, post-industrial economies reward those who control and process information (Kennard 2000); thus, controlling online data has become a potent new source of influence. Increasingly, states have sought ways to regulate, surveil, and censor the digital flow of information (Greenwald 2014; Hu 2017; Wills 2017). At the same time, information has become the new capital (Johnson Andrews 2019), and private industries have worked to monetize digital space through privatization, datafication, and dataveillance (Gorwa 2019; Mineo 2017; Van Dijck 2014; Wu 2016). These triple processes refer to how through digital technology, from online tracking cookies to "smart" devices, corporations monitor people's actions, convert them into data, and then extract and commodify the data for the purposes of predicting and controlling future behavior. This new economic logic of capitalist accumulation has become known as "surveillance capitalism" (Zuboff 2019). It focuses on the centrality of corporate power at the heart of the digital age, which in turn fuses with the modern surveillance state to form new techno-legal regimes (Fuchs 2017).

Yet, with increased control has come increased resistance. There is also evidence that individuals are utilizing digital space to collectively organize into social movements to oppose the growing authoritative control of state and corporate powers over digital space (Beraldo and Milan 2019; Coleman 2013; Milan 2013; Postigo 2012). For example, on July 4th, 2012, the 236th anniversary of the U.S. Declaration of Independence, digital activists with the non-profit organization Free Press published the *Declaration of Internet Freedom*. It states:

We stand for a free and open Internet.

We support transparent and participatory processes for making Internet policy and the establishment of five basic principles:

Expression: Don't censor the Internet.

Access: Promote universal access to fast and affordable networks.

Openness: Keep the Internet an open network where everyone is free to connect, communicate, write, read, watch, speak, listen, learn, create and innovate.

Innovation: Protect the freedom to innovate and create without permission. Don't block new technologies and don't punish innovators for their users' actions.

Privacy: Protect privacy and defend everyone's ability to control how their data and devices are used.[1]

This declaration has been co-signed by hundreds of activists, organizations, scholars, and politicians, and translated into over 70 languages. While it may be lacking in specifics or enforcement power (Mystal 2012), the wide-spread popularity of works like this reflect an emerging sense of new digital values and a rapidly growing area of contestation over online space and the rights and freedom of those operating within it. According to the Free Press' website, "We are not the first nor will we be the last to attempt to articulate basic principles to guide Internet policy and promote the rights of Internet users around the world. This Declaration of Internet Freedom is part of that ongoing global conversation, and we recognize and rely on these previous efforts."

My dissertation analyzes this contemporary social activism, which aims to define and protect freedom and rights of individuals online. I refer to this new area of "contentious politics" (Tilly and Tarrow 2007) as *digital contention*; that is, the political contestation over the governance of online digital space and the rights of its users. For the purposes of this dissertation, I limit the concept of digital contention to refer to the social movements which

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[1] http://www.internetdeclaration.org/ (accessed 02-28-2017).

advocate specifically for creating a free and open Internet for all. While the term digital

contention could also be thought of as applying to a wider phenomenon of movements fighting

over their rights online, such as extremist groups who use "freedom of speech" to defend

themselves from being censored from online platforms, such groups are not included in this

study. For groups like that, digital rights are only a means to advance their own hate speech and

propaganda online, and thereby increase their own influence. They are not interested in Internet

freedom for all, only for themselves. In contrast, the movements in digital contention that I

examine in this dissertation, including "hacker" culture and open-source communities, are those

for whom digital rights and Internet freedom for all are both the means and the ends of their

activism.

      Understanding this collective action is significant precisely because of the space in which

it takes place. Because these movements are so invested in digital space, they are not only

working to shape it, but are also heavily shaped by it. Furthermore, their embeddedness within

that space makes these activists engaged in digital contention the "canary in the coalmine" for

understanding the effects of digital space on activism, possibly foreshadowing effects that may

impact all social movements in the future as digital technology continues to spread into every

facet of our lives. Therefore, focusing on this contemporary digital activism, my dissertation

project asks: how does collective action operate differently in this space than in other, more

traditional offline sites of inquiry? What advantages or constraints has this space presented for

activists?

Digital Space

      What are the characteristics of today's digital space? The Internet has become something

quite different from what was originally intended. Its earliest incarnation was a secret U.S.

military project called the Advanced Research Projects Agency Network (ARPANET). But

almost immediately upon its public release in the late 1980s, individuals began adapting this

telecommunications network for their own purposes by building local, grassroots communities

known as computer bulletin board systems (BBSs), ultimately connecting them together into the

first global online conversation, known as Usenet (Castells 2001; Rheingold 2000). This freedom

to tinker and share became infused into the core of Internet technology and culture (Coleman

2009, 2013; Lessig 2004; Levy 1984). For many, the Internet became an alternative to the

traditional structure of laws and markets and the commercialization of television and radio, a

space where people could build a new type of "commons" based on sharing and equality. Coders

and hackers developed new private licenses, such as the General Public License (GPL) and the

Creative Commons License (CC), which enabled free information sharing and open source

platforms, bypassing the complications of copyright law. A host of homegrown media, including

free and open source software, listservs, Websites, chat rooms, instant messaging, and later,

blogs, podcasts, wikis, and social media, brought together techies, legal scholars, activists,

artists, scientists, students, and new businesses into what some have referred to as a new "digital

commons"[2] (Bollier 2008) or "free culture" (Lessig 2004), which forms the core communities

and culture for activists engaged in digital contention.[3]

     While many people today know the Internet primarily via commercial social media

platforms (e.g., Facebook, Instagram, etc.), the digital commons of the Internet are far more than

a single platform. Rather, it is a complex construct of numerous concurrent online networks and

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[2] The digital commons is defined as "information and knowledge resources that are collectively created and owned
or shared between or among a community and that tend to be non-exclusive, that is, be (generally freely) available to
third parties. Thus, they are oriented to favor use and reuse, rather than to exchange as a commodity" (Fuster Morell
2010:5).
[3] More on this in the next chapter.

channels, many of which remain free,[4] non-commercial, open-source platforms, such as Internet

Relay Chat (IRC). I contend that these networks can collectively be thought of as forming a new

digital space. Theoretical work in this direction is thus far limited, however. Several scholars

have focused on how digital communities form using cultural perspectives. For example, using

the analogy of the "long tail" of outliers in a statistical distribution, Anderson (2006) argues that

digital space has enabled millions of outlier subcultures which collectively form a "long tail"

Internet culture. Some of the more technologically optimistic scholars have argued that in the

face of a competitive world, people bind together online for "collective goods" such as social

capital, knowledge, and communion (Kollock and Smith 1996), forming virtual communities as

places for genuine human interaction like a familiar corner bar (Rheingold 2000). In essence, we

can think of these as new types of "imagined communities" (Anderson 1991), based on common

interest (Licklider and Taylor 1968), which can serve as a new "third place" of informal social

public life, vital for civil society, democracy, and civic engagement (Oldenburg 1989). Ideally,

virtual communities are based on the "power of cooperation" (Rheingold 2000) to harness

"collective intelligence" (Lévy 1999) and the "wisdom of crowds" (O'Reilly 2007; Surowiecki

2006). Others have also theorized how physically fragmented communities can exist virtually by

maintaining shared communication channels, practices, and discourses through "media circuits"

(Lange 2008), "virtual settlements" (Jones 1997), and "communities of practice" (Wenger 1998).

Gee (2005) took the research a step farther by shifting his analysis from online

communities to the digital spaces in which they form, which he called "affinity spaces." Others

have also conceptualized the digital realm as a new "free space" (Castells 2008, 2015; Norris

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[4] "Free as in speech *and* free as in beer." This is a classic phrase used by the Free/Open Source Software (F/OSS) community to describe two different meanings of the term "free." "Free as in speech" refers to rights, as in you are free to do what you want with the software, while "free as in beer" refers to being free of monetary cost.

2002) for the discussion of ideas and building of culture and communities. Applying this insight to the study of online activism, I argue that understanding the space in which online activity takes place is a crucial step for exploring not just community formation, but also the dynamics of power and collective action. Indeed, scholarly attention to space in relation to contentious politics has become a central concern of social scientists over the past few decades (Davies 2012; Leitner et al. 2008; Tilly 2000). Sociologists from Georg Simmel to Saskia Sassen have long argued for the sociopolitical significance of space. For example, Lefebvre (1974:26 cited in Lim 2014:52) wrote extensively about how "space is socially produced and serves as a tool of thought and of action, as a means of production, control, domination and power." Likewise, Foucault (1984:246 cited in Lim 2014:52) wrote "it is somewhat arbitrary to try to disassociate the effective practice of freedom by people, the practice of social relations and the spatial distributions in which they find themselves. If they are separated, they become impossible to understand."

Martin and Miller (2003) further argue that the mechanisms and processes of contention are innately and necessarily spatial. Space "constitutes and structures relationships and networks…situates social and cultural life including repertoires of contention; is integral to the attribution of threats and opportunities; is implicit in many types of category formation; and is central to scale-jumping strategies that aim to alter discrepancies in power among political contestants" (Martin and Miller 2003:144–45). While these theorists were writing about physical spaces, their logic applies just well, if not more so, to digital space. In recent years, geographers have begun to recognize that space does not have to be only physical – rather, it is defined as relational and topological, which includes digital space (Marston et al. 2004; Massey 2004). Following this line of reasoning, digital space should also have its own particular structuring

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influences on the dynamics of contention, especially among the activist community involved in digital contention, who are most deeply embedded and invested in this space. But social scientists have typically thought about space geographically, not virtually, with some notable exceptions (e.g., Calhoun 2007; Castells 1996, 2015; Lim 2014, 2015; Lindgren 2013).

As noted earlier, my interest lies in activism in digital space. Most recent literature concerning online activism has focused on how the affordances of digital tools, particularly of specific social media platforms, can be leveraged by collective actors to their advantage (Bennett and Segerberg 2013; Bennett, Segerberg, and Walker 2014; Earl and Kimport 2011; Gerbaudo 2012, 2014; Mattoni and Treré 2014; Tufecki and Wilson 2012; Tucker et al. 2016). This literature includes, among other things, how social media use can bolster participation in politics and social movements (Boulianne 2015; Kahne and Bower 2018), allow people to communicate directly to the public uncontested and unfiltered by the news media (Haase-Reed, Kushin, and Koeppel 2007), and enable people to self-organize without necessarily being physically present in the same time or place and with less reliance on institutional infrastructure and resources (Clemens and Minkoff 2004; Earl and Kimport 2011; Rheingold 2002; Ross 2011; Shirky 2008). Online networks like social media have become major sources for social movement communications and bloc recruitment because they allow for such a "quick and broad dissemination of information" (Petit 2004:1) among individuals who are already connected to one another. For example, the "cute cat theory of digital activism" states that large, public social media networks (i.e., Facebook, Twitter, and similar platforms) originally designed for mundane activities, like sharing cute cat pictures, can be a great advantage for social movement activists who may lack resources to develop their own dedicated tools (Shapiro 2009; Shirky 2011; Zuckerman 2008).

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While these studies have produced important and useful findings, Gerbaudo and Treré (2015) point out that this somewhat narrow view precludes understanding the larger cultural and structuring implications of digital space. This dissertation project builds upon that point by examining how activists engaged in digital contention are shaped by digital space. In other words, I aim to look beyond the instrumental view of the Internet as a mere tool. By adopting the perspective of the spatial theorists cited in the preceding paragraphs, I look at the Internet as a digital space in order to examine how this space "constitutes and structures" (Martin and Miller 2003:144) the mechanisms and processes of digital contention. Specifically, in this dissertation I examine the collective action dynamics of political opportunity (McAdam 1982) and threat (Einwohner and Maher 2011), framing (Benford and Snow 2000), and frame resonance (Snow and Benford 1988) in digital space. How might these dynamics be operating differently in this space than they have in other contexts that have been studied by movement scholars?

This dissertation is significant because, first, it will contribute to the study of social movements. Examining activists engaged in digital contention can add theoretically important insights into changing movement processes and provides a scholarly opportunity to see how well existing theoretical concepts in the field of social movements apply to this relatively new, developing space. This research is also significant because of the newness of these issues and of the technology itself. Some scholars have suggested that Internet technologies can have liberating effects, such as by enabling new forms of "sousveillance" or an "ego-panopticon" in which power is shifting from the state towards individuals (Mann and Ferenbok 2013; Smith, Bellier, and Altick 2011). However, Lessig (1999, 2006) argued that the Internet is inherently vulnerable to state intervention and control. In a democratic society, it is possible to shape technology in ways that are consistent with democratic principles. But if people do not exercise

their agency over this technology and make their preferences heard, then the very technology could instead be used to constrain and regulate behavior in ways that are not consistent with societal values. Understanding digital contention should therefore be of great interest to all people living in the modern digital age whose lives are increasingly intertwined with this technology, since the outcome of these movements may significantly shape the balance of power and future of digital rights and freedom for all. The findings of this work can also have implications for the development of Internet governance and other technology policies, which has become a major area of interest in the policy arena in recent years (Gorwa 2019; Helberger, Pierson, and Poell 2018; Pasquale 2015).

My study uses both computational and more traditional qualitative methods to examine two social movements engaging in digital contention: The Digital Rights movement (DR), and the online collective known as Anonymous (ANON). In the next chapter, I ground my inquiry by discussing the public sphere and the importance of understanding digital space in relation to the processes of digital contention. I also delve more explicitly into my two sets of research questions and review the supporting literature: first, regarding the perception of political opportunities and threats in digital space, and second, about the challenges and impediments for achieving frame resonance and efficacy by digital activists. In the following chapters, I provide a more explicit definition of my concept of digital contention, explain my case selection, and lay out the theoretical significance of my two cases. Next, I present two empirical chapters, which each analyze the aforementioned collective action processes in digital space. These chapters offer insights into the operation of social movement dynamics in digital space. I finish with a discussion of the implications and limitations of this study, and suggestions for future research.

CHAPTER 2: REVIEW OF RELEVANT LITERATURE

In this chapter, I expand upon key concepts and theories that help explain the importance of the "space" that is the Internet and how it may shape the activism taking place within it. I began in the previous chapter with a discussion of how the Internet has emerged as a new collective digital space teeming with new digital cultures and communities. Here, I argue that this digital space has culminated in a new type of digital public sphere. This chapter further develops my foundational argument that digital space, just like physical space, can have important influences on the way certain processes of collective action operate. In particular, I argue that the dynamics of political opportunity structures and threats, framing, and frame resonance are each shaped in distinct ways by this new space. I describe each process in turn in the sections below and explain in detail my empirical research questions related to their operations in digital space.

Foundation

The Digital Public Sphere

By understanding the digital realm as a space, we can begin to see how it may constitute a new form of what Habermas ([1962] 1989) called the public sphere, a type of *digital public sphere* which builds and expands upon the existing offline public sphere, bringing new venues for engagement and communication, and new potential to revitalize civil society and democracy. Bollier (2008:2) writes that the networked environment of the Internet has a virally propagating effect on novel ideas and information which not only "radically accelerates the process of innovation" but also "enlivens democratic culture by hosting egalitarian encounters among

strangers and voluntary associations of citizens. Alexis de Tocqueville would be proud." Others have conceptualized this type of digital public sphere as "the virtual sphere" (Papacharissi 2002), "networked publics" (Varnelis 2008), or a "networked public sphere" (Shirky 2011; Tufekci 2017). Collective actors can also convert digital spaces into "disruptive spaces" (Lindgren 2013) to counter what Gramsci (1971) called the hegemonic order of societies. Dahlgren (2006:160) argues that, "The Internet is at the forefront of the evolving public sphere, and if the dispersion of public spheres generally is contributing to the already destabilized political communication system, specific counter public spheres on the Internet are also allowing engaged citizens to play a role in the development of new democratic politics."

We have already witnessed many grassroots social movements and revolutions arise in recent years sparked by a single event or idea which was spread rapidly through the networks and platforms of digital space, such as the 2009 Green movement in Iran, the 2011 Arab Spring uprisings, the 2011 15-M Los Indignados movement in Spain, and the plethora of Occupy-style movements around the world, from New York to Istanbul to Hong Kong (Gaffney 2010; González-Bailón et al. 2011; Howard et al. 2011; Juris 2012; Tremayne 2014; Tucker et al. 2016). Furthermore, by connecting people both within and across borders, some have even pointed out that online ties may aid in the formation of a new transnational or global civil society (Castells 2008; Guidry, Kennedy, and Zald 2000; Piper and Uhlin 2004), or what McLuhan (1962) famously named the "global village," which can help facilitate transnational activism (Ayres 2005; della Porta et al. 2006; Fisher et al. 2005; Juris 2008; Williford and Subramaniam 2015).

The Internet provides space for a new digital public sphere which has helped revitalize democratic discourse and increase social movement participation for millions of people around

the world. But we can also see that its advantages may be less available to some groups than others. The fact that certain hegemonic and elite groups may be over-represented in this space means that it is possible that preexisting dynamics of power and domination may be reified within virtual communities and online movements. In this way, the effect of the digital public sphere may be double-sided. On one hand, it has been shown that face-to-face democracy in the traditional offline public sphere can suppress group differences in problematic ways (Fraser 1992; Mansbridge and Morris 2001; Young 2002). Therefore, the greater openness, accessibility, and in some cases anonymity of digital space should help enable a wider range of diverse participation in which everyone can speak with an equal voice, allowing disenfranchised groups previously blocked from political action to find their voices (Deseriis 2013; Schlosberg and Dryzek 2002). After all, digital space affords anyone the potential to become the next *ad hoc* movement leader or create the next viral hashtag without the traditional need for resources, experience, or institutional infrastructure. These affordances enable new avenues which can help increase representation from disadvantaged populations who lack resources or political power, something which many offline social movements struggle to do (Strolovitch and Forest 2010; Weldon 2011).

On the other hand, the techno-utopian promises of the Internet as a "free space" may obfuscate power differentials and lead to increased suppression and discrimination within online communities and social movements. Many contemporary online spaces, such as Facebook, are not anonymous. Social media profiles often portray an individual's real offline identity, which can lead to practices of online discrimination and exclusion that mirror offline inequalities (Nakamura 2008). One challenge is that "if the enclaved and subaltern are difficult to identify in reality, then they may be even more difficult to identify in cyber-reality" (Palczewski 2001:181).

Perhaps, as with offline movements, these issues can only be resolved by acknowledging and confronting differences in power and privilege head-on through the construction of "networked counterpublics" (Jackson and Welles 2015, 2016), such as in the Black Lives Matter movement, or the pursuit of more inclusive and intersectional forms of deliberation through "active solidarity" (Einwohner et al. 2019). As one digital rights activist recently wrote, "being more inclusive of diverse populations is not only just, but may help strengthen the Net as a whole. After all, who better to anticipate potential flaws in the system than those from marginalized communities who are more accustomed to technology being used against them for censorship, tracking, and surveillance?" (Stepanovich 2017).

Limitations of Digital Space as a Public Sphere

As the preceding argument notes, digital space is far from perfect, and we must be careful not to fall into the perspective of techno-utopianism (Matei 2005). Beyond these concerns, there are three major criticisms or limitations that have been highlighted by Internet and social movement scholars. First, some critics argue that virtual interaction is a poor substitute for face-to-face communities and belies how alienated our modern world has made us. They contend that online social movements are more transient (Bimber 2001), and that virtual networks cannot replace the trust and interpersonal relations that are forged in face-to-face interaction to sustain long-lasting communities and movements (Aday et al. 2010; Diani 2010; Etzioni and Etzioni 1999; Lynch 2011; McAdam 1996; Tufekci 2017). It has also been suggested that the Internet may encourage "slacktivism" in which people substitute real substantive activism with low-cost point-and-click online activism (Gladwell 2010), although this assertion has not born out in research (Davis 2011; Halupka 2017; Lee and Hsieh 2013). Some have even found that the traditional problem of "free riders" is greatly reduced in online activism (Bimber et al. 2005; Earl

and Kimport 2011; Tufekci 2014). For the most part, this line of critique has been losing ground in the face of the explosion of new research on social media activism. Currently, the consensus appears to agree with Tufekci (2017) that rather than focusing on whether online collective action is as effective as offline, as if they are mutually exclusive, we should instead be examining how these two realms often work together and interact in contemporary collective action.

Second, exclusion from participation in the digital public sphere can result from lack of access. Not all groups of people have equal access to the Internet, especially groups at lower socioeconomic levels, a phenomenon known as the "digital divide" (Gurel 2015; Schradie 2018, 2019; Tilly 2004). For example, countries in the Global North tend to have the highest Internet penetration rates, with North America and Western Europe at the top of the list with over 80% each, while the lowest tend to be in the Global South, such as Africa and South Asia with less than 30% each (Statista 2016). This structural inequality serves as a barrier preventing many people, especially from developing nations, from being equal participants in the digital public sphere. But this disparity is shrinking rapidly thanks to the proliferation of smart phones. Research shows that in just two years, between 2013 and 2015, the number of Internet users in developing nations rose by 9% (Poushter 2016). However, as noted earlier, despite its democratizing potential, the fact that certain hegemonic and elite groups may be over-represented in digital space means that it is possible that some preexisting dynamics of power and domination may be perpetuated (Fuchs 2011; Morozov 2011).

Third, some scholars have pointed out that certain social media may merely be an attractively packaged substitute for democratic discourse distracting us while private businesses and governments quietly take control to monopolize and commoditize the system, just like what happened to so many promising new industries earlier in our history (Matei 2005; Wu 2010).

Notably, the role of Russian propaganda and misinformation campaigns during the 2016 U.S. Presidential election has dramatically shifted public opinion against popular social media platforms like Facebook. For example, on November 4, 2017, *The Economist* ran an issue featuring on its cover the Facebook logo stylized as a smoking gun and asking, "Do social media threaten democracy?" Shortly after, in April 2018, Facebook CEO Mark Zuckerberg was questioned in front of federal House and Senate subcommittees about this issue, after it was revealed that a data brokerage firm called Cambridge Analytica had harvested extensive personal data from more than 87 million Facebook users without their permission and used these data to assist the Donald Trump presidential campaign (Rosenberg, Confessore, and Cadwalladr 2018). Research has in fact shown that social media disinformation campaigns and algorithmic bias have exacerbated political polarization in the U.S. (Faris et al. 2017; Marwick and Lewis 2017; Wardle and Derakhshan 2017). For much of the first fifteen years of the 21st Century, social media has been praised for its democratizing effects, such as during the Arab Spring uprisings in 2011. Yet now many people fear that it may be doing just the opposite by encouraging radicalization and magnifying the voices of extremist and hate groups (Phillips 2018; Tufekci 2018a).

On this third point, it is important to reiterate that digital space is far more than just Facebook or YouTube. Those are privatized, commercial platforms that harvest people's data and commodify their privacy in order to micro-target content and advertisements to its users (Tufekci 2018b, 2018c). In Silicon Valley parlance, such platforms are known as a "walled garden" which is a "closed ecosystem in which all the operations are controlled by the ecosystem operator" (Poulpiquet 2017). The purpose of the walled garden strategy is to create a digital space that is controlled or isolated from the rest of the Internet so as to monopolize a user's

attention for profit. While a surge of recent research has focused on the unknown biases produced by the hidden algorithms of these private platforms (e.g., Eubanks 2018; Noble 2018; O'Neil 2016; Pasquale 2015), these efforts towards privatization and commercialization are one of the primary issues that make control over digital space so highly contested today.

In a classic essay about "new electronic media," Enzensberger (1970) argued that media are fundamentally egalitarian, but it is up to users to realize their potential. The philosopher Baudrillard (1981) countered this argument, stating that, while media are liberatory, it is first necessary to liberate them from the dominant classes which monopolize and divert them for their own purposes. This argument quite closely reflects the general "technophilia versus technophobia" debate that continues to this day. For example, some contemporary researchers are focusing on how hidden, proprietary algorithms on commercial online platforms can distort and bias our digital public sphere (Caplan and boyd 2016), while others have shown that even on commercial social media platforms, activists can "conquer and construct" digital public space for popular contestation (Poell and Van Dijk 2016). It would appear that the most constructive approach to this field, then, is not asking whether Internet technology is "good" or "bad" for social change (clearly it can be both), but rather to empirically examine specific effects digital space can have on theoretically important processes. The goal of this dissertation, therefore, is to ask how digital space shapes how activists engage in dynamics of contention.

Thus far, I have argued that digital space constitutes a new public sphere in which activism takes place. This conceptualization serves as the starting point for this dissertation. Now, I will examine whether certain social movement dynamics (the perceptions of opportunity and threat, and framing processes) operate differently in this new space than traditional social

movement theory predicts. In the next sections, I elaborate on my specific research questions and present a review of the relevant literature for my substantive empirical chapters.

Research Questions

My research questions are presented in two sets, each of which explore the newness of digital space and the advantages and constraints it presents for movements of digital contention. To briefly summarize, my first set of research questions focuses on the dynamics of political opportunities and threats, two central concepts from theoretical work on social movements (Almeida 2003; Bob 2002; Einwohner and Maher 2011; Goldstone and Tilly 2001; McAdam 1982; Tarrow 1998; Tilly 1978). These concepts refer to changes in the broader environment in which movements exist that can increase the likelihood of mobilization. Applying these concepts to my study, I ask: How do activists of digital contention perceive the opportunities and threats present in this new online environment of digital space? Do they talk about opportunity and threat in the same way as activists in other spaces do? If, for example, the Internet can provide new ways of reducing the cost of action (Earl and Kimport 2011), does this newness manifest in new ways of interpreting opportunity and threat? Specifically, might threat become more salient for mobilization than opportunity when the cost of collective action is reduced in digital space?

A second set of questions addresses the framing processes, or the "meaning work" that is performed by social movements (Benford and Snow 2000) and the extent to which movement frames ring true or "resonate" with external audiences (Snow and Benford 1988). Given that the technology and related political issues around digital space frequently involve highly technical aspects, it is arguable that factors such as the digital divide and the knowledge gap have impeded external movement audiences' ability to understand problems. Therefore, how have social movement organizations worked, if at all, to overcome this obstacle in order to communicate

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with and elicit support from wider external audiences? How do their framing strategies address the knowledge gap and digital divide? Below, I discuss these theoretical literatures in more detail and expound upon these two sets of research questions.

Political Opportunities and Threats

Political process theory (PPT) is one of the most well-developed theoretical models for explaining social movements. PPT focuses on three factors vital for movement formation and development: cognitive liberation, organizational strength, and political opportunity (McAdam 1982). Cognitive liberation, or insurgent consciousness, refers to the development of a collective sense of injustice among groups or classes in society and the belief that collective action is an appropriate and effective remedy. As such, these ideas form the motivation for actors to mobilize and are shaped by the political context (Meyer 2004). Organizational strength builds on the earlier resource mobilization theory (RMT) by looking at the leadership and resources of social movement organizations (SMOs), as well as networks for support and recruitment (Tarrow 1998). While RMT maintains that movements must receive resources from external elites, PPT contends that movements can generate their own resources (McAdam 1982).

Political opportunity, the third factor, implies that openings or vulnerabilities in the political structure create opportunities for movements to mobilize and push for change. Political opportunities are, "consistent – but not necessarily formal or permanent – dimensions of the political struggle that encourage people to engage in contentious politics" (Tarrow 1998:71). These opportunities can include increasing access, shifting alignments, divided elites, and influential allies. Further theorizing suggests differences between stable political opportunity structures, such as aspects of nation-states and formal institutions which only change very slowly

and with great effort, and volatile political opportunities, which shift more rapidly within protest

cycles (della Porta 1995; Gamson and Meyer 1996; Jenkins 1995; Kriesi 1995).

Additional support for this theory has come from research on revolutions that shows that

state crises and divides between state and elite actors can create openings for revolutionary

movements to emerge (Goldstone and Useem 1999; Goodwin 2001). But it has also been found

that collective action can result from the very absence of opportunity (Einwohner 2003).

Goodwin (2001) finds that state repression in some cases can actually facilitate protest and

revolutionary movements. Some scholars have also contended that threat, or the cost of inaction,

can motivate movement participation just as opportunity does (Almeida 2003; Einwohner and

Maher 2011; Goldstone and Tilly 2001; Maher 2010; Van Dyke and Soule 2002). If opportunity

is an opening which lowers the cost of collective action, then threat is a force which increases the

cost of inaction. In this manner, opportunity can be understood as a "pull" while threat can act as

a "push" to mobilize collective action (Einwohner and Maher 2011:129). Goldstone and Tilly

(2001) differentiate two types of threat: *current threat,* or the harms that are currently

experienced or anticipated, and *repressive threat*, the danger of repression if protest is

undertaken. Threat can mobilize collective action when the costs of inaction, or current threat,

come to outweigh the costs of resistance, or repressive threat. For example, Van Dyke and Soule

(2002) show empirically how U.S. militia organizing in the 1990s correlated with threatening

structural changes such as the loss of jobs and increases in minority and female representation in

the government. Almeida (2003) explores the sequencing of opportunity and threat by examining

waves of protest in El Salvador from 1962 to 1981. He shows how varying levels of opportunity

and threat over time influence the organization of contention, first with the establishment of civic

organizations during a period of openness followed by radicalization during a period of state

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repression and threat. Still, there is much debate in the literature over the differences between opportunity and threat, and under what conditions each might be more or less influential for the mobilization of collective action (Johnson and Frickel 2011; Shriver et al. 2015).

Useful though it is, political process theory has been criticized for being overly focused on structure and resources to the neglect of culture and agency (Goodwin and Jasper 1999). With this in mind, some have argued that the subjective perception and interpretation of opportunities and threats makes a significant difference in how they will impact a movement and how a movement will act on them. After all, an opportunity not seen is an opportunity that, for all intents and purposes, does not exist. Following this view, some have attempted to synthesize the macro-level institutional influence of opportunity structures with the micro-mobilization views of actors. They propose that opportunities must not merely exist but must also be perceived and interpreted by actors (McAdam 1982; McAdam, Tarrow, and Tilly 2001; Meyer and Minkoff 2004). For instance, McCammon (2012a) argues that the most effective movements are those which are able to perceive and actively interpret signals from their environment, and use this information to effectively assess, revise, and implement new tactics during contentious campaigns, a process which she calls "strategic adaptation." The mobilizing potential of threat is also contingent upon perception and interpretation (Einwohner and Maher 2011; Maher 2010; McVeigh 2009; Van Dyke and Soule 2002). Like opportunities, threats are dynamic, and it is important to understand how actors decide what is threatening, how those assessments may change over time, and how they may facilitate mobilization (Maher 2010). Einwohner and Maher (2011) argue that the perception of threat is measured in five dimensions: *severity*, *temporality*, *applicability*, *malleability*, and *credibility*. For the death camps and Jewish ghettos in World War II, repressive threat was extremely high and thus collective resistance only

occurred when the current threat was perceived as "unsurvivable, imminent, applicable to local actors, and nonmalleable, and the information on which these assessments are based is believed to be credible" (2011:141).

This body of research shows that both opportunities and threats can lead to social movement mobilization, but they must be perceived and interpreted in order to be acted upon. I argue that a study of digital contention can potentially reveal new understandings of how activists perceive opportunity and threat, and how such perceptions are structured by digital space. After all, Meyer (2004) argued that grievances, which form the motivation for actors to mobilize, are shaped by the political context, and Martin and Miller (2003:144–145) argue that space "is integral to the attribution of threats and opportunities." But because the theoretical literature on opportunity and threat was largely developed prior to the introduction and widespread adoption of ICTs, it is worth asking if these concepts still hold true for activists of digital contention. Therefore, I ask, how do activists of the movements of digital contention perceive and talk about structural opportunities and threats? Does the new digital environment of the Internet engender new ways of thinking about opportunity and threat? Do these activists draw upon opportunity and threat in different ways from what traditional social movement theory would lead us to expect?

As noted earlier, Earl and Kimport (2011) argue that the Internet affords new ways to reduce the cost of action. If opportunities also serve the same function of lowering the cost of collective action, how might they be perceived differently in digital space when the cost has already been sufficiently lowered by technological affordances? Will they still hold the same salience for activists? Might this new digital space also influence the way activists interpret threat? For instance, if digital space is understood as a free and open space by the activists of

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digital contention[5], might this understanding structure their perceptions in such a way that they are more inclined to see and respond to threats to said freedom?

As indicated above, my first set of research questions rests on the perception of opportunities and threats, and how this is shaped by the new digital space that is the Internet. My second set of research questions pertain to dynamics of framing and frame resonance by these digital social movement groups. The following sections describe the relevant literature on framing.

Framing

Based on Erving Goffman's concept, a frame is a way of interpreting something, or a "schemata of interpretation" that enables individuals "to locate, perceive, identify, and label" an issue, problem, or event (1974:21). Frames function as a way for people to create meaning and thus guide their actions, like a "story line" (Gamson and Wolfsfeld 1993). According to Johnston (2002), frames are both fixed cognitive structures and emergent cognitive processes, existing as both a noun "frame" and a verb "framing." Framing as a verb denotes "meaning work" or an "active, processual phenomenon that implies agency and contention at the level of reality construction" (Benford and Snow 2000:613-614). Snow and Benford in particular have developed this theoretical concept in relation to social movements. They introduced collective action frames as, "emergent action-oriented sets of beliefs and meaning that inspire and legitimate social movement activities and campaigns. They simplify and condense the 'world out there' by selectively punctuating and encoding objects, situations, events, experiences and sequences of actions within one's present or past environment" (Snow and Benford 1992:137).

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[5] More on this in Chapter 3.

Collective action frames serve as modes of articulation and attribution, including prognostic, diagnostic, and motivational framing. Snow and Benford (1988) describe these as the three "core framing tasks." Prognostic frames define a problem and attribute blame to a specific source, diagnostic frames prescribe a solution to the problem including tactics or strategies to achieve said solution, and motivational frames seek to mobilize people to collectively take action. The first two tasks, prognostic and diagnostic, pertain to "consensus mobilization" which involves collective agreement on defining a problem and its solution, while the third, diagnostic, is known as "action mobilization" which is a call to people to collectively act (Klandermans 1984; Snow and Benford 1988). Collective action frames are thus utilized as a micro-mobilization process to "frame or assign meaning to and interpret relevant events and conditions in ways that are intended to mobilize potential adherents and constituents, to garner bystander support and to demobilize antagonists" (Snow and Benford 1988:198).

Collective action frames are strategically crafted and deployed in order to mobilize collective action (Noakes and Johnston 2005). For example, McCammon, Hewitt, and Smith (2004) show how U.S. woman suffragists in the late nineteenth and early twentieth century were highly strategic in choosing between more moderate or radical frames to amplify depending upon changing opportunities and the external target audience. Frames are generated through discursive and at times contested processes. According to Gamson (1992:111), "Collective action frames are not merely aggregations of individual attitudes and perceptions but also the outcome of negotiating shared meaning." Collective action frames have been shown to vary depending upon whether they are constructed by elite or nonelite actors within movements (Hull 2001), on organizational identity and counterframing processes (McCammon 2012b), and in competition with the frames of oppositional movements (Dugan 2004). Studying and

understanding collective action frames therefore allows us to understand how social movements and their organizations generate shared meaning and mobilize collective action.

There is a complex relationship between macro-level structure and micro-level mobilization processes. As stated above, structural opportunities and threats must be perceived in order to be viably acted upon. The broader political opportunity structure can also constrain or enable what collective action frames are available to a movement at a given time (Benford and Snow 2000), and changes in said structure can lead organizations to shift or alter their frames (Rothman and Oliver 1999). Interestingly, some researchers have even found that under certain conditions or in certain environments, overly optimistic perceptions and motivational frames can actually overcome limitations in or create opportunities where none structurally existed (Einwohner 2003; Gamson and Meyer 1996; Kurzman 1996), and that threats can sometimes be over-exaggerated leading to increased mobilization, such as through "warfare frames" (McVeigh 2009; Wright 2009).

Frame Resonance

Movement actors and organizations actively construct collective action frames from what Swidler (1995) calls their "cultural tool kit," including myths, vocabularies, themes, and ideologies. Yet while they produce collective action frames by drawing from the movement's inner performative cultural repertoire, at the same time, those frames have to mesh or resonate with the external systemic culture in order to be successful in mobilizing participation and influencing public discussions (Johnston and Klandermans 1995). Snow and his colleagues (1986) define the process by which collective action frames are linked with the understandings and beliefs of individuals as frame alignment. This process is part of the task of consensus mobilization and increases the possibility of achieving frame resonance – that is, how well a

frame fits in accordance with the culture and ideological structures of individuals – with targeted constituencies (Benford and Snow 2000; Snow and Benford 1988; Snow 2004). Furthermore, while the resonance of most collective action frames is context specific, those with greater flexibility and wider scope which are able to achieve greater resonance across multiple campaigns or protest cycles are known as master frames (Snow and Benford 1992).

The degree of frame resonance is dependent upon the three following factors: *empirical credibility, experiential commensurability*, and *narrative fidelity* (Benford and Snow 2000; Snow and Benford 1988). In other words, how well does a frame fit with events in the world, individual experiences, and cultural narratives and beliefs, respectively? For example, Babb's (1996) analysis of "greenbackism" and "producerism" in the Labor movement of the late 1800s shows the conflict that can arise between ideology and experiential commensurability. Collective action frames that deal with everyday experience, she argues, are easily falsifiable and can collapse if they are not able to adapt to changing circumstances and explain anomalies. Einwohner (2009) probes the role of empirical credibility by examining resistance efforts in the Jewish ghettos of Nazi-occupied Warsaw, Vilna, and Łódź during World War II. She finds that Jews in Warsaw, as opposed to the other two ghettos, collectively fought back against their captors not only because they were able to gain information about the Nazi's regime's true plans of genocide but also because they believed the information was credible. Williford and Subramaniam (2015) examine the role of narrative fidelity by exploring two sites, the U.S. and Ecuador, in a transnational network resisting oil exploration in the rainforest. They particularly highlight the importance of translating local grievances into "universal" issue frames that resonate with audiences in other cultural and national contexts in order for transnational advocacy to be successful.

In addition, Benford (1993) elaborates on the task of action mobilization, or what Gamson (1995) calls the "agency" component of collective action frames, through what he describes as "vocabularies of motive." These socially constructed vocabularies operate as stories which assist in motivating and sustaining participation in collective action. He identifies four vocabularies of motive: *severity* brings attention to the importance of the problem, *urgency* emphasizes the need to remedy it, *efficacy* highlights the collective ability to solve the problem, and *propriety* encourages a sense of ownership of it, or moral responsibility. However, Benford is also careful to point out the delicacy of these vocabularies, depending on their relative salience and in what combinations they are used, which he describes as "framing hazards" (1993:208). For example, too much severity can be overwhelming and lead to pessimism, while too much efficacy can reduce urgency. Benford addresses this issue by showing how social movement actors could work to overcome these hazards by redefining costs and setbacks as successes or badges of honor. Civil disobedience and arrests, for instance, were reconstrued as benefits and rewards to help stimulate participation, although he also suggests that "there may be limits to the effectiveness of such linguistic tactics" (1993:208).

Consensus and action mobilization in collective action frames both rely on frame resonance. But along with empirical credibility, experiential commensurability, and narrative fidelity, scholars have identified several limitations on achieving resonance. While framing is considered from the social constructionist view as "the purposively constructed guides to action created by existing or prospective movement organizers" (Tarrow, 1992:177), it presumes that culture and meaning are consciously and freely constructed. However, resonance depends upon the culture and ideologies of the audiences being targeted and of the larger society, which can vary over time and place. Noonan (1995) suggests the existence of cultural opportunity structures

which can influence what types of collective action frames are available to a movement in a given time and place. Similarly, Burns (2005) argues that changing cultural conditions throughout the twentieth century influenced the choice between "morally limiting" and "moral worldview" frames among the pro-life and pro-choice movements, while McCammon et al. (2004) shows that shifting cultural opportunity structures in the early 1900s significantly shaped the choices between moderate and radical frames among US women suffragists. Ideology also influences the facilitation or repression of collective action frames, as Critical and Marxist researchers have long argued that structural and class conditions can heavily influence meaning and culture in ways that preclude activism and prevent the purposive construction of culture and consciousness (Adair 1996; Gaventa 1980; Gramsci 1971; Scott 1990). Building on this line of thought, what other cultural and structural factors might inhibit the resonance and mobilizing efficacy of collective action frames?

The Barrier of Problem Recognition

One such contemporary factor that is especially relevant to activism in the digital sphere is the increasingly rapid rate of technological progress, which has brought about the "digital divide" and the "knowledge gap." Computing capabilities, such as processing speed and memory capacity, have been increasing exponentially over the years, impacting almost every aspect of the world economy (Rauch 2001). In 1965, Gordon Moore, co-founder of the computer hardware company Intel, observed that the number of components in an integrated circuit had doubled every year since its invention in 1958, and he predicted that it would continue to do so in the years to come. This trend became known in the computer industry as "Moore's Law," which is considered the driving force of technological and social change in the digital age (Intel Corporation 2005).

While technology advances more and more with every passing day, evidence has shown that advanced ICTs are not evenly distributed. Globally, the most advanced ICTs tend to be concentrated in more developed Western countries, leading to what is commonly known as the aforementioned "digital divide" (as discussed above). In fact, more recent research has shown that the digital divide is not only a phenomenon of global inequality, but also exists between the rich and poor even within wealthy countries like the United States (Tomer and Kane 2015). For example, although this disparity is shrinking every year, Pew Research Center finds that one third of Americans earning less than $30,000 per year do not have smartphones and nearly half do not have broadband Internet or a desktop computer (Anderson and Kumar 2019). Thus, the digital divide persists as a barrier for some people in less developed countries as well as in lower socioeconomic classes within developed countries. However, as Warschauer (2004) argues, what is most important in the digital divide today is not just the physical availability of computers and the Internet but rather people's ability to make use of those technologies to engage in meaningful social practices. This phenomenon is known as a "second-level digital divide" (Hargittai and Hinnant 2008:1). For instance, in addition to class differences, research shows that it is young, well-educated individuals who get the most out of Internet use (van Deursen and Helsper 2015; Warf 2018), while older generations tend to have the lowest rates of digital media literacy (Guess, Nagler, and Tucker 2019). All these factors contribute to a significant knowledge gap regarding digital technology.

Traditionally, the *knowledge gap hypothesis* refers to how knowledge is unequally distributed in a social system along socioeconomic lines (Tichenor et al. 1970). But this logic can also be applied to our understanding of the digital divide to explain the gap in knowledge specifically of digital space, the Internet, and related ICTs, such as coding, digital graphics

design, and familiarity with advanced software and hardware. This gap in knowledge can then help explain gaps in understanding and participation when it comes to Internet-enabled activism. For example, Schradie (2018, 2019) argues that, despite the democratizing potential of the Internet, social movement organizations with greater resources are better able to use digital tools than the resource-poor, leading to what she calls a "digital activism gap." When it comes to the activism related to digital contention specifically, we could expect such a gap to be even more exacerbated for two reasons. First, the practices of states and corporations to surveil and control people's data are intentionally concealed from the public and obfuscated by complex and largely unregulated technologies. Second, as I discuss in the next chapter, the activism (and hacktivism) against such practices may at times also take place completely hidden from public view. Therefore, for the average Internet user, the concept of digital rights, much less the idea that these rights are being actively fought over, may be completely unknown.

The lack of understanding of this technology, and by extension the political issues surrounding it, among some social groups has created a barrier for digital contention activists, or a lack of *problem recognition*. Problem recognition is the acknowledgement and definition of an issue that does or may arise during the performance of a process. This term is commonly used in the business world to describe consumer decision-making, but it can be applied in many ways. I use it for social movements to describe a factor which impedes the ability of collective action frames to find frame resonance with potential participants and larger communities outside of the movement due to the inability of people to comprehend the problem. This barrier may result in highly stratified communities of activists and supporters involved in the issues of digital contention. It may thus become necessary for activists to engage in special efforts in the construction of collective action frames and the use of experts to overcome such barriers.

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Some earlier researchers have explored the political dimensions of science and technological change. Habermas (1970) famously probed how science and technology can be considered a form of ideology. Nelkin (1975) showed how experts and scientists play a somewhat ambivalent role in controversial policy areas. Experts can clarify technical issues, but can also lead to increased conflict, and acceptance of their views is based less upon their validity or competency and more upon whether it reinforces existing values and beliefs. Epstein (1996) analyzed "credibility struggles" and how specific beliefs and spokespersons become accredited as authoritative. Today, with crowd-sourced online projects such as the Zooniverse,[6] more and more unaccredited individuals are engaging in "citizen science" (Luczak-Roesch et al. 2014) perhaps further shifting the socially accepted definition of what it means to be an expert. On top of this, in recent years we have witnessed the dawning of what has become known as the "post-truth" era (Flood 2016), in which the proliferation of online disinformation and "fake news" has significantly eroded trust in traditional experts, media, and social institutions (Farkas and Schou 2018), and scientific evidence now has to compete with "alternative facts" (Floridi 2016; Norman 2016; Woolacott 2016). In this context, how have the activist groups in digital contention worked, if at all, to overcome the obstacle of problem recognition? How have they tried to communicate the importance of their issues across the digital divide, and/or to individuals who may not even be aware of the contention over digital space? Do their framing strategies rely more on accredited experts or crowdsourcing, and how do these strategies shape their respective activist cultures and communities?

In the rest of this dissertation, I present a study designed to answer my two sets of research questions. In the next chapter, I describe my analytical cases, the Digital Rights

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[6] Zooniverse is an online web portal through which a wide variety of scientific organizations crowd-source large-scale data analysis and sorting tasks to the public, such as parsing genomic data or classifying galaxies.

movement and the Anonymous hacktivist collective, and this phenomenon I conceptualize as

digital contention. In Chapter 4, I detail the data and methods I used for my empirical study.

Chapter 5 presents the findings for my first set of research questions, while Chapter 6 addresses

the findings for the second set. Chapter 7 concludes my dissertation with a discussion of the

implications of my results, limitations, and directions for future research.

CHAPTER 3: ANALYTICAL CASES

As I noted in Chapter 1, I use the term *digital contention* to refer to movements and actions of contentious politics directly related to the struggles over rights and freedom in online space. Contentious politics is defined as, "interactions in which actors make claims bearing on someone else's interest, in which governments appear either as targets, initiators of claims, or third parties" (Tilly and Tarrow 2007:4). Digital contention is the contestation between activists, corporations, and governments over online space and the rights of entities operating therein. It arises precisely because this space and the technology that enables it are still so new that such rights have yet to be clearly and universally defined.

Digital contention is conceptually distinct from what has become known as digital- or cyber-activism, however. The latter refers to the tactical use of digital tools and information for the purpose of activism which can be used by any activist or organization for any cause, such as environmental activists, anti-nuclear activists, or even political parties. For example, the 2008 U.S. Presidential campaign to elect Barack Obama extensively incorporated social media and networks into its process of field organizing (Stirland 2008). Virtually all social movements today utilize cyber-activism in some form or fashion. It has even been argued that for many contemporary social movements, the adoption of cyber-activist tactics is becoming increasingly necessary for their success. More of our social and political worlds have moved online, and so too must social movements. As Rolfe (2005:1-2) puts it, "The importance of digital space as a site for contestation is increasing as the groups with which movements are contesting become more vested in the online realm. The locus of power is becoming virtual, and to remain relevant the site of protest must accommodate this."

But digital contention is more than just using the tactics of cyber-activism; it concerns activism directed towards defining the rights and freedom of the Internet itself, as illustrated by the Declaration of Internet Freedom quoted earlier. This issue of Internet freedom has shown itself to be a powerful mobilizing force for some groups of Internet users, especially those with deep investments and participation in digital cultures. Digital contention can manifest in a variety of forms. In some cases, it may be highly visible such as in court cases or street protests, whereas in other cases it can take place hidden below the surface concealed within the coding of digital space itself. Internet-enabled mobilizations and innovative e-tactical repertoires (Earl and Kimport 2011) have been preferential methods of protest, albeit organized and deployed in sometimes very different ways by various organizations and collectives.

There have been many publicly visible campaigns of collective action in recent years pertaining to digital contention, involving hundreds of thousands of participants and causing major impacts on government policy and social awareness. These include campaigns against corporate intellectual property restrictions (Corrons 2010; Wortham 2012), campaigns against online censorship (Crawley 2011; Lee 2012), campaigns in support of Internet regulations such as Net Neutrality (Sasso 2015: Tomchak and Wendling 2016), and campaigns against mass electronic surveillance and information gathering (Gold 2015; Kelly 2013). However, at its core, digital contention has grown from the online communities and cultures of the digital commons, including what is known as the Free/Open Source Software (F/OSS) community, as well as a wide range of hackers, coders, systems administrators, security researchers, and other digital technology professionals and hobbyists. It is from these communities that the Digital Rights movement (DR), and later the Anonymous hacktivist movement (ANON), arose in response to perceived challenges against the freedoms of digital space. My study design focuses on these two

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activist-oriented social movements and treats each as a case. In the following sections I describe my cases in more detail. To understand DR and ANON, however, one must first understand the history of the Internet.

Historical Background

As alluded to in the previous chapter, the Internet of today actually began as a military project called ARPANET, or the Advanced Research Projects Agency Network, funded by the United States Department of Defense (Lievrouw and Livingstone 2006). It was initially conceived of by the RAND think tank as a communications network which could survive a nuclear attack. The idea was to design an electronic network in which information was distributed with no central control in such a way that if any one node in the network was removed (i.e., a city or military base destroyed by a nuclear weapon), then the network would still have numerous alternative routes through which it could pass information. In other words, the very nature of this system was designed for complete and unhindered information sharing; as Internet pioneer and activist John Gilmore described it, "The Net interprets censorship as damage and routes around it" (quoted in Elmer-DeWitt 1993). Because of this design, openness and the freedom of information stood as the default state of the Internet from its beginning. As I describe below, this infrastructural design became interpreted as a new set of values that were deeply embedded in the foundations of early digital cultures. Anything seen as detracting from this freedom was interpreted as opposition, or a threat to the freedom of the Internet, and thus the subsequent movements of digital contention arose in response to such perceived threats.

In the early 1980s, National Science Foundation funding expanded access to ARPANET, and by the late 1980s and early 1990s, commercial Internet Service Providers (ISPs) began to emerge in big cities, building off the infrastructure of ARPANET and similar projects to

eventually grow into what we now recognize as the Internet. But what is perhaps most important about this story, as Rheingold (2000:8) argues, is that "the most profound technological changes have come from the fringes and subcultures, not the orthodoxy of the computer industry or academic computer science." The websites and email which we consider so essential to the Internet today were the result of people adapting technology designed for one purpose to suit their own communication needs. It was hobbyists who connected their home computers to telephone lines and created the first grassroots communication networks, known as computer bulletin board systems (BBSs), by piggybacking legally on the telecommunications network, which eventually grew into the anarchic global conversation known as Usenet in the 1990s. It was these unforeseen innovations which led to the Internet developing its own culture and virtual communities. "This invention of distributed conversation that flows around obstacles—a grassroots adaptation of a technology originally designed as a doomsday weapon—might turn out to be as important in the long run as the hardware and software inventions that made it possible" (Rheingold 2000:9).

Early virtual communities such as the WELL (Whole Earth 'Lectronic Link), founded by activists Stewart Brand and Larry Brilliant in 1985, were strongly infused with many of the utopian ideas and values of the counterculture movement of the 1960s and 1970s, including the seemingly contradictory values of communalism and anarchism (Castells 2001; Hafner 1997; Matei 2005; Rheingold 2000; Seabrook 1997). The WELL was one of the first and most influential virtual communities, envisioned as a "new Jeffersonian democracy based, not upon equal distribution of land, but upon equal access to information" (Roszak 1994:147). Although Internet culture has changed much over the past few decades, these values formed the foundation of Internet culture, including the freedom of access, of speech and expression, to share

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information, and to tinker and innovate (Coleman 2009, 2013; Lessig 2004). Levy (1984)

describes this moral philosophy as "the hacker ethic." It is this culture from which the social

movements of digital contention have developed.

The ideals of this Internet culture first came into conflict with the law in 1985, when MIT

hacker Richard Stallman founded the Free Software Foundation (FSF) and began writing the first

free "open source" software code. F/OSS is software that is free of any private ownership and

open to anyone who wishes to help develop or just tinker with it. It was intended as an

alternative to closed, proprietary software systems produced by corporations such as Microsoft

and Apple. Stallman had little interest in challenging the law itself, but he soon ran into trouble

after being accused of violating patent and copyright restrictions. As a solution, he developed the

General Public License (GPL) in 1989, also known as "copyleft." Put simply, Stallman realized

he could tinker with the law the same way he tinkered with computer code, and created a legal

license which undermined the very logic of copyright by allowing for free and open

modification, distribution, and access to software code (Coleman 2009). The GPL enabled the

Linux project in 1991, which today is the largest F/OSS project in the world with thousands of

contributors working from all around the planet. This was the first instance of digital contention,

when the online cultural value of the freedom of information challenged the legal statutes of

private property and control over cultural production.

Digital Rights Movement (DR)

The Digital Rights movement was born from these issues, starting with Richard Stallman

and the Free Software Foundation (FSF) in the mid-1980s, followed by the establishment of the

Electronic Frontier Foundation (EFF) in 1990. In 1999, a new and more visible level of

contentious politics around the freedom of information erupted (Coleman 2009; Postigo 2012). It

began when a small group of hackers and coders created a Linux program called Decrypt

Content Scrambling System (DeCSS) and released it for free on the Internet. The software

allowed Linux users to watch DVDs on their computers, but also made it easier for them to copy

and thus pirate the films. The DVD Copy Control Association and the Motion Picture

Association of America (MPAA) mounted a campaign to censor the software program and any

website that shared it, arguing that it violated the Digital Millennium Copyright Act (DMCA) of

1998. Along with two other lawsuits, a 16-year-old Norwegian programmer named Jon Johansen

was arrested for releasing the code, which sparked a wave of counter-protests. According to

Coleman (2009), hackers and coders had acquired new legal expertise through their experience

with F/OSS projects which they put to use in this case, arguing that computer code is a form of

speech, and thus should be legally free from censorship. One activist named David Touretzky

demonstrated this idea notably by sharing the DeCSS code on his website[7] in the form of a haiku

poem and as a recording of a person singing. The judges in the lawsuits ultimately were

persuaded that computer code is in fact a form of speech. This idea of "code is speech" became

the moral philosophy of the F/OSS community and the DR movement which helped launch the

debate and solidify activism on digital rights and freedom.

Today, F/OSS has expanded significantly and become quite mainstream in its use by

academics, librarians, scientists, and other content creators based on the development of a legal

structure known as the Creative Commons (Coleman 2009, 2013; Lessig 2004). But contention

over copyright and intellectual property laws between activists and corporations has not ceased,

and in fact has become commonplace. The EFF, originally a small non-profit legal defense

group, has now become an influential civil society organization of lawyers, lobbyists, technical

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[7] https://www.cs.cmu.edu/~dst/DeCSS/index.html (accessed 05-21-2020).

advisors, and activists. It is one of the most central and widely recognized social movement

organizations (SMOs) of the DR movement. In addition, the DR movement has now grown to

consist of numerous newer SMOs, including Fight for the Future, Free Press, May First/People

Link, Demand Progress, and the Student Net Alliance, among others. These organizations

engage in lawsuits, lobbying, and legal protest campaigns (such as online petitions and boycotts)

with the goal of establishing rights and protections of individuals in the digital realm. Their

campaigns over the past decade in particular have mobilized massive grassroots (or "netroots")

support and achieved high levels of success, such as the campaigns against the Protect IP Act

(PIPA) and the Stop Online Piracy Act (SOPA) in 2012 (Moon, Ruffini, and Segal 2013) and the

Net Neutrality campaigns in 2014-2015 (Sasso 2015).

Anonymous (ANON)

Beginning around 2006, another group emerged online from an unexpected corner of

Internet subculture, an English language-based imageboard website known as 4chan.

Imageboards are online forums on which users can post comments and share images and website

links on certain topics. 4chan's "/b/" board for random topics was especially infamous for its

irreverent and sometimes vitriolic atmosphere, designed to both entertain and shock (Douglas

2008; Grigoriadis 2011). It has been described as "at once brilliant, ridiculous, and alarming"

(Michaels 2008). Because many users do not identify themselves, their posts are automatically

credited to "Anonymous." Over time, users of 4chan's "/b/" board began to make jokes about

Anonymous being a single, real person having an extensive conversation with him or herself.

Eventually, the concept of Anonymous as a collective identity evolved into an Internet meme

(Beyers 2014; Coleman 2011, 2014; Landers 2008). Initially, groups began using this collective

identity to go on virtual "raids" of other online websites and communities for fun, or "lulz." But

over time, it began to take on a different meaning. In 2009, the Anonymous collective underwent

a dramatic transformation during its first major activist campaign, known as Project Chanology.

Participants in Anonymous, or "Anons" for short, launched a massive protest campaign against

the Church of Scientology after the Church attempted to censor a certain video from the Internet.

Thousands of Anons utilized all their tactics of trolling and computer hacking, including

everything from making prank phone calls to shutting down websites to organizing physical

demonstrations outside of Dianetics Centers around the world. For the first time, this campaign

demonstrated the true potential of Anonymous as a collective political actor and drew in a

massive number of new participants focused on more activist-oriented causes.

Today, Anonymous is a loosely defined transnational collective of computer hacker-

activists ("hacktivists") who have mobilized dozens of online direct-action campaigns to

digitally disrupt those whom they perceive as opponents (Coleman 2014). Their primary modus

operandi is "hacktivism," or the use of computer hacking tools and techniques for political

activist goals (Goode 2015; Samuel 2004; Tilly and Tarrow 2007). While the Anonymous

subculture still embodies the philosophy of "lulz" (Coleman 2011, 2014), its campaigns also

appear to reflect many of the same issues of Internet freedom as the DR movement, such as

freedom of speech, freedom from censorship, and the freedom to share information (Goode

2015). For example, on September 18, 2010, Anonymous began "Operation Payback" which

launched Distributed Denial of Service (DDoS) cyberattacks against dozens of websites of

intellectual property firms and trade associations, including the MPAA. Within one month, they

had disabled these websites for a combined total of 537 hours, making it one of their largest and

most successful campaigns (Corrons 2010). A statement released to the press on behalf of the

movement said, "Anonymous is tired of corporate interests controlling the internet and silencing

the people's rights to spread information, but more importantly, the right to SHARE with one another... In their eyes is not hope, only dollar signs. Anonymous will not stand this any longer." (quoted from Crawley 2011).

Anonymous is a complex and ideologically heterogenous entity, which prides itself on its egalitarian, anti-leader aesthetic (Coleman 2014; Deseriis 2013; Fuchs 2013; Goode 2015). It consists of numerous distributed individuals and subgroups, such as AnonOps, and many scholars have debated whether it should be thought of as a type of social movement, a collective collaboration, or an activist ensemble (Coleman 2014, 2017; McDonald 2015; Uitermark 2017). However, while participants may come and go over time, and key nodes in the network may rise and fall, "the overarching ideals remain in play" (Coleman 2014:48). Like the DR movement, Anonymous is also a product of modern Internet culture, albeit a more anarchistic branch of it. It is essentially the unfiltered "id" of Internet culture. They favor more confrontational forms of direct action and seem to have less concern for the legality of their tools and tactics. In this sense, Anonymous can be considered a radical flank of the DR movement, or a particular wing of a movement that is more ideologically extreme and more likely to use disruptive or illegal tactics (Freeman 1975).

Theoretical Significance of Cases

DR and ANON have both arisen out of Internet culture as direct responses to the techno-legal regimes and institutions which increasingly seek to control and restrict digital space for their own agendas. In addition to this intrinsic cultural connection to digital space, these movements are also novel because they are so innately and necessarily technological. Digital technology is not just an optional tool for them to utilize to expand or enhance existing processes; rather, they are dependent upon that technology at least in part to achieve the social

change they seek. But these technologies are not just instrumental tools. Their design practices are explicitly political; therefore, the technologies are explicitly meaningful. As Postigo (2012:8) writes, "Their creation and existence can be read as a form of protest (so they are meaningful beyond their function), but they also realize part of the central goal the movement seeks: a culture that is participatory (with the tools to engage in participation)." These technologies, along with the ideas they symbolize and the realities they create, build upon themselves in what is known as a corkscrew paradigm of change; according to Bollier (2008:2), "Innovation of one Internet cohort rapidly becomes a platform used by later generations to build their own follow-on innovations."

Furthermore, digital technology comprises both the obstacles activists face and the means they use to resist. According to Postigo (2012:11), "the Digital Rights movement, unlike many other social movements, confronts not only legal regimes, but technological regimes as well, some of which exist outside the reach of traditional institutional mechanisms for social change (lobbying, for example)." Lessig (1999) argues that in a democratic society, people can use the law to shape technology (or code) in ways that are consistent with democratic principles. But if people do not exercise their agency over this technology and make their preferences heard, it could very well be used to constrain and regulate behavior in ways that are not consistent with societal values. That is, while states traditionally use law as the primary means of social control, with digital technology they can now control behavior directly in extra-legal ways. This practice is known as "technological enforcement," as is visible for example in corporate digital copyright controls and state digital surveillance. The movements of digital contention can be seen as the counter-hegemonic response to these techno-legal regimes, creating and using their own technologies to resist and subvert the regimes of technological enforcement in the only way

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possible (Beraldo and Milan 2019; Milan 2013). Coleman (2017) further argues that contemporary hacker communities have been mobilized into political action by a series of critical events, from the attempted blacklisting of WikiLeaks in 2012 to the Edward Snowden leaks in 2013, driving them as a group to become political players by converting their coding tools and knowledge into what she calls "weapons of the geek."[8] Similarly, Fish and Follis (2016) show how, unbeknownst to many average Internet users, digital space today is being actively shaped by this ongoing contention between hacktivists and the state. For example, the fight over encryption and online anonymity, which continues to play out both in courtrooms as well as less visibly in the coding of the infrastructure of digital space itself (DeNardis 2012), will ultimately determine the definition and availability of privacy for all Internet users.

As we can see, these activist movements in digital contention are in a unique cultural and technological position, which links them very closely with digital space and the technology that makes it up. While many social movements utilize the Internet in some form which may lead to certain changes in the dynamics of activism, movements in digital contention are tied so intrinsically to this space and to the contestation over it that they are especially likely to adapt and innovate new social movement processes in the pursuit of their goals. Their protests are not only products of the space, but also help shape the space itself both juristically and technologically, which is then built on by the next campaign or cohort of online activists. These factors make them particularly interesting cases of study for understanding the changing nature of activism in digital space.

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[8] This is a play-on-words referring to Scott's (1985) concept of "weapons of the weak" which described how poor rural peasants converted their farming tools into weapons in order to rebel against much more powerful authorities. Coleman (2017) uses a similar line of reasoning to explain how the hacker and coder community, an otherwise privileged group, has become so politically influential in recent years.

Case Selection

In addition to the aforementioned characteristics, these two cases (DR and ANON) were chosen in order to capture a range of dynamics related to the phenomenon of digital contention. While these two movements share some similarities, they are also different in important ways. Namely, DR is a mainstream movement made up of formally structured organizations such as the EFF which acts completely within the boundaries of the law, combining online digital activism with offline activities in the legal institutions. In contrast, ANON is a more radical decentralized collective which favors more confrontational tactics and operates almost entirely in digital space. By selecting these two cases, I am able to assess a range of internal social movement dynamics which could be missed by analyzing a single case. In Chapter 5, I examine the perceptions of political opportunities and threats in both cases in order to determine how, if at all, digital contention differs from traditional social movement theoretical explanations.

In addition, these two cases present a useful opportunity to assess variation across them considering that both operate concurrently within the same digital space and within the same broad social structure and political environment in the arena of digital contention. In Chapter 6, I take a more comparative approach by examining the differences in their framing and frame resonance processes. Previous researchers have found evidence for the existence of a "radical flank effect" (Ellefsen 2018; Haines 1984, 2013; McCammon et al. 2015; Robnett et al. 2015) in which a more radical wing of a movement may influence the mainstream organizations, or vice versa. By comparing my cases, I explore the differences between my two cases in light of the digital divide and the knowledge gap. In the remaining chapters, I present analyses that seek to answer my research questions about the activists in these two movements, and their framing processes and perceptions of opportunity and threat. The next chapter describes my data and methods.

CHAPTER 4: DATA AND METHODS

To answer my research questions, I utilized a mixed-methods approach. First, I analyzed four years of textual archival documents (newsletters and press statements) from each case using automated text mining and analytics. Text mining is the process of using computer software to generate quantitative statistics about textual data, while text analytics involve using algorithms to extract meaning by searching for relationships and patterns in text. Used together, these techniques can help to identify key concepts and their frequencies, as well as the networked relationships between them, thus providing information about the structure of meaning of a corpus and the specific ways in which certain concepts are used. Second, I conducted qualitative coding and analysis on these data to see in greater detail what was being said in the texts. Combining these computational and qualitative methods enabled me to utilize a strategy of triangulation to answer my research questions (Berg and Lune 2012). These data are used for my analyses in both Chapters 5 and 6. Third, I conducted participant-observation at two sites directly related to my cases in order to acquire additional data regarding the framing processes and strategies of each of my cases for my analysis in Chapter 6.

Data

The data comprising each corpus for this study consisted of public documents from each of my two cases, DR and ANON. These were documents which were issued on behalf of each group to an audience of their own followers and to the general public. For the Digital Rights movement, I selected one component organization: I analyzed the newsletters of one of its oldest and most active social movement organizations, the Electronic Frontier Foundation (EFF). This newsletter is called the "EFFector" which is a pun on a computer science term meaning, "a

device for producing a desired change." All issues of the newsletter were publicly available on

the EFF's website.[9] For Anonymous, there were no official organizations to choose from, so

instead I analyzed the press statements issued by one of the largest and most active public

outlets, known as AnonNews. These Anonymous press statements are perhaps best known in

video form with a person wearing the infamous Guy Fawkes mask reading through a digitally

altered voice. According to Coleman (2014), these statements are written through a deliberative

process involving numerous Anonymous authors. While Anonymous' very first statement, the

infamous "Message to Scientology" video, was uploaded to YouTube in 2008, it was not until

2009 that the collective started releasing routine press statements. AnonNews maintained a

website[10] from 2009 up until 2012, which kept a textual archive of every press statement issued

on behalf of Anonymous. AnonNews still maintains a Twitter account today, and has been

associated with other prominent Anonymous subgroups such as AnonOps, which has been

described as one of the most prolific nodes in Anonymous (Coleman 2014) and is also the name

of one of the main channels on IRC (Internet Relay Chat) through which many major

Anonymous campaigns were planned and executed.

Although these two sources of data are not identical, they both offered a view into how

movement activists understand and frame specific issues and events. I chose to examine

documents that were issued between 2009 and 2012. This period was chosen for two reasons.

First, it was the available range of the AnonNews archive at the time they were retrieved. The

site began archiving the statements in 2009 and was then shut down in 2012. I originally

accessed and saved the Anonymous press statements in 2012, just prior to when the site was

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[9] https://www.eff.org/effector (accessed 02-28-2017).
[10] http://www.anonnews.org (accessed 01-10-2012).

permanently taken down.[11] As far as I could find, no other complete public archive of Anonymous press statements like this exists. While this factor could be considered a limitation of this study, nonetheless the data were rich enough to reveal patterns in how activists interpreted opportunity and threat and constructed collective action frames. Second, this period represents a high point of activity for both movements. The Digital Rights movement's numerous campaigns against surveillance and intellectual property restrictions, and mass protests against the international trade deal known as ACTA, occurred during this time (Lee 2012; Wortham 2012). In addition, some of the largest Anonymous hacktivist campaigns also occurred therein, such as Operation Payback against Mastercard and Paypal, and Operations Tunisia and Egypt during the Arab Spring uprisings (Coleman 2014; Crawley 2011).

During this period, the EFF website contained 135 issues of its "EFFector" newsletter. Each newsletter contained a list of recent press releases and short summaries relating to current issues and events of interest to the EFF, which linked to longer more in-depth articles. For this same period, the AnonNews archive contained just over 400 Anonymous press statements. Each statement was typically written in the style of a letter, addressed to a specific audience (e.g., "People of Tunisia", "Fellow Anons", or "Members of NATO"). Unlike the EFFector newsletter, which covered several topics in each issue, each of the Anonymous press statements was on average shorter and addressed only one specific issue at a time. The structure and tone of each corpus in many ways strongly reflected the attitudes and ideas of each group. For the purposes of this study, these documents were well-suited data for studying how movement activists internally perceived and interpreted opportunities and threats as well as how they framed issues for external audiences.

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[11] The website can still be accessed through the Internet Archive's Wayback Machine, but this does not show the entire AnonNews archive, only a few of its final posts.

I chose to draw smaller representative samples from the corpora so that the results of the automated analysis could also be triangulated with manual qualitative coding of the texts. Combining qualitative with computational text analysis to triangulate the results helps to increase the reliability of the findings (Berg and Lune 2012; Doerfel and Marsh 2003; Lambert 2017). If we treat individual documents as the unit of analysis and consider all EFFector newsletters and AnonNews press statements as the respective populations, then the 135 Effector newsletters and 200[12] AnonNews press statements between 2009 and 2012 are my sampling frame. I randomly sampled from each, using a random number generator. I began with the AnonNews statements and randomly sampled 100. After eliminating duplicates, I ended up with a sample of 50 out of 200 unique statements (25%). From the EFFector newsletters, I determined that this sample size might be too small for analysis, so I increased it to a total of 41 out of 135 (30%). Unfortunately, I was unable to go back and increase the AnonNews sample to match because the archive was taken offline.[13] The text of the EFFector newsletters was copied and pasted into a single document totaling 92 pages, while the Anonymous press statements made up 48 pages. The qualitative analysis was carried out directly on these documents,[14] whereas the text mining and analysis required additional cleaning and preprocessing, described below.

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[12] The full archive contained 400 statements; however, I originally downloaded 100 random statements and half of them turned out to be duplicates. For example, a single statement sometimes would appear multiple times translated into different language. Based on this, I estimated the total number of unique statements in the AnonNews archive to be around 200.

[13] As stated previously, the AnonNews archive was taken offline shortly after I drew this sample in 2012, so I was unable to expand upon it. Nevertheless, after conducting my initial wave of exploratory text mining, I determined that the data were rich enough for analysis, and that I had reached a point of sufficient data saturation (Strauss and Glaser 1967; Strauss 1987).

[14] Some of the AnonNews statements lacked titles or dates and thus could not be accurately cited as individual documents. Instead, the sampled texts were combined into a single text document for each corpus. Because of this, the quotations presented in Chapters 5 and 6 are cited by the line number in which they appeared in their respective corpus.

Research Strategy

As indicated above, I used a two-fold research strategy to analyze the documents. First, I used text mining to discover and count the most commonly used concepts across the documents, as well as semantic network analysis to look for relationships between concepts with Automap and NodeXL software. Automap duplicates the process of classical quantitative content analysis by identifying concepts, their frequencies, and their co-occurrences within a text corpus (CASOS N.D.). NodeXL then allows one to visually plot the data as a network. In this type of network, known as a semantic network, the nodes represent concepts or themes, while the ties or edges between them represent how frequently they co-occur in close proximity to one another in the corpus. Semantic network analysis has been used as a method to model mental mapping (Diesner and Carley 2004a) in that the author's "mental map" can be visually represented as a network of ties (Carley 1997a; Carley and Palmquist 1992). Cognitive scientists argue that language is understood and communicated in a hierarchical structure which conveys meaning (Collins and Quillian 1972; Federmeier and Kutas 1999; Lakoff and Johnson 1980). Because networks are capable of mapping social structure, they can therefore also be applied to the mapping of structure within language (Doerfel and Marsh 2003). According to Carley (1993), the mapping of concepts in relation to one another "enables a picture of the web of meaning contained within a text" which can reveal insights into the content and structure of a text (c.f. Doerfel 1998:17).

Text mining and semantic network analysis, also referred to as network text analysis (Carley 1997b; Diesner and Carley 2004a; Diesner and Carley 2004b), have not been widely adopted in social science research, thus the literature is still fairly sparse. However, recent research has demonstrated the validity and usefulness of these methods in analyzing such patterns as the bibliometric causal-chain network of research literature on social media (Ngaia, Taoa, and Moon 2014), issue positioning of candidates in US Presidential debates (Doerfel and

Marsh 2003), styles of representation in US legislators' press releases (Grimmer 2016), the communicative constitution of online hate groups (Eddington 2018), and the social structure of covert terrorist networks in news reports (Diesner and Carley 2004b).

The second part of my research strategy involved qualitatively coding each corpus (MacMillan and Koenig 2004). Qualitative coding of textual data has a long history in the social sciences and can provide rich and detailed findings (Berg and Lune 2012). Software like NVivo allows for what is known as CAQDAS, or Computer Assisted Qualitative Data Analysis (Fielding and Lee 1991). NVivo software was not used to automate the process, but rather to provide a platform to help organize the data so I could conduct my own coding. Using NVivo, I manually went through each sampled corpus line-by-line to highlight portions of text to associate with specific codes that I created. My coding process was based on a modified grounded theory approach, combining both deductive and inductive coding of data from my cases in multiple iterative passes (Bringer, Johnston, and Brackenridge 2006; Strauss 1987). I coded primarily for any expressions about the ways in which political opportunities and threats were perceived. I also coded for collective action frames and vocabularies of motive. Additional codes emerged from the data during this process that were incorporated into the subsequent iterations of coding (see Appendix A).

Cleaning and Preprocessing

Before analyzing the data, I manually cleaned the text documents by removing website links and headings. I also removed dates, times, IP addresses, phone numbers, and other numbers which were unimportant for this research. I did this manually instead of using an automated

process because there were some numbers which had meaning and I wished to keep intact, such as "the 99%"[15] and the dates of specific pieces of legislation.

Using the AutoMap software, I then began automated preprocessing of the data. First, I ran all text cleaning processes, which included expanding common abbreviations and contractions (for example, "US" becomes "United States"), removing extra spaces, fixing common typos, and pronoun resolution (for example, he, his, and him are all converted to the same term). Second, I converted all words to lower case, and removed all day and month words, punctuation, and possessives. Third, I converted all hyphenated words to NGrams, and ran the automated NGram conversion. This process replaces space between words with an underscore so they will be counted as a single word in text mining, for example, "United States" becomes "United_States". These are all standard cleaning processes that help to remove excess "noise" from the data and produce more meaningful results by translating text-level concepts into higher-level concepts (Diesner and Carley 2004a).

The automated NGram conversion in AutoMap is limited, however, so I also generated a list of suggested NGrams from each text document. This process generated 978 suggestions from the Anonymous text, and 2710 suggestions from the EFF text. Many of these suggestions were useful for combining words that were specific concepts, enabling the subsequent text mining and analysis to more effectively focus on more meaningful words which connect to them; for example, "4th amendment" became "4th_amendment". But many of the AutoMap generated suggestions were not so accurate, therefore I manually sorted through each NGram to delete those which were not meaningful as well as to add new ones which were left out. Ultimately, I ended up with a list of 563 NGrams for the Anonymous text, and 1107 for the EFF text. These

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[15] A term made famous by the Occupy Wall Street protests of 2011.

final lists, known as a generalized thesaurus, were then applied to their respective text corpora in order to convert the texts into their matching NGrams.

Following these steps, I then ran automated preprocessing algorithms to delete any remaining symbols and numbers. Next, I ran the stemming process, using the default "KStemmer" which converts all words (except already defined NGrams) into their base form so they will be counted together in the text mining (for example, "loves" and "loving" both become simply "love"). I also applied the standard delete list and removed all remaining noise words in AutoMap. This process gets rid of common words which carry little meaning by themselves, such as "be" and "the" so that the text mining can focus on substantive concepts. Then, for each corpus I generated a list of concepts and their frequencies, which I then searched through manually to identify any remaining "noise" words that lacked substantive importance but were missed by the standard delete list (for example, typos and errors like "thi" and "didn"). I used these concepts to create custom delete lists, which I then applied to the texts. With all the data cleaning and preprocessing completed, the last step was to generate the final concept frequency list along with the co-occurrence list. The co-occurrence list used a standard window of two, meaning it counted how frequently two concepts appeared within two lines of each other through the entire corpus. The co-occurrence lists were then used to generate semantic networks with NodeXL software, as shown in my Findings section below.

Qualitative Coding

As stated above, I utilized a modified grounded theory approach to qualitatively code the sampled corpora. This process combined both deductive and inductive coding in multiple iterative passes (Bringer, Johnston, and Brackenridge 2006; Strauss 1987). I manually coded the

texts deductively (using NVivo[16]) for any words reflecting a perception of political opportunity or threat and framing techniques based on the conceptual definitions outlined in my theoretical framework. Under political opportunity, I also created child codes for stable and volatile opportunities. Under threat, I created child codes for current and repressive threat. In order to capture collective action frames, I made codes for diagnostic, prognostic, and motivational frames, including child codes under motivation frames for the vocabularies of motive (efficacy, propriety, severity, and urgency). I deductively coded the texts in multiple iterative passes for words, phrases, or entire paragraphs which fit the definitions of these concepts.

While doing my careful read of the qualitative data for coding purposes, I also paid special attention to searching for high frequency concepts and themes that were revealed by the automated text analyses (as shown in the findings of Chapters 5 and 6) to better interpret and contextualize their meanings. For example, the highest co-occurring word pair for the EFF corpus was *copyright troll*. Therefore, a careful read of the qualitative data allowed me to place this term in context, thereby demonstrating how it illustrated activists' perceptions of opportunity and threat. Additional themes emerged inductively during this process, which were then incorporated into the coding in subsequent passes. I tried to capture any emergent themes—those I did not intentionally set out to look for when I began coding—which might have any relevance to my research questions. For the EFF, additional emergent themes included alliances with other organizations, acknowledgement of diversity, the creation of digital tools and resources, educational efforts, organizational maintenance (e.g., fundraising, award ceremonies, etc.), and

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[16] NVivo shows both frequency of coding and percentage of text coverage of each code. In Chapter 5, I provide the percentage of text covered by my two main codes, Opportunity and Threat, because I determined this number best illustrated my main argument for that chapter. In contrast, Chapter 6 focuses more on *how* frames were constructed rather than the quantity of text. Nevertheless, In Chapter 6, I provide the frequency of the codes to help show how the various framing processes were used and convey to readers the systematic process of my coding.

self-references and identification. For Anonymous, the emergent themes included audience, capacity, acknowledgement of diversity, statements of ideology, and self-references and identification (see Appendix A).

Participant-Observation

My second set of research questions involves comparatively examining the framing strategies used by the activist groups in digital contention, and how if at all they endeavored to overcome the obstacle of problem recognition. In order to address these questions, in addition to the qualitatively coded archival documents described above, I use participant-observation data I conducted at two different sites: online meetings of the EFF's Electronic Frontier Alliance, and the Anonymous Million Mask March protest rally. First, for the Digital Rights movement, I participated in the Electronic Frontier Foundation's open monthly video conference meetings for its activist network known as the Electronic Frontier Alliance (EFA). I attended six meetings from 2016 through early 2017. Second, I attended the 4th annual Anonymous Million Mask March in Washington DC on November 5, 2016. This event is the largest public demonstration by the Anonymous movement and one of the rare opportunities to observe Anonymous activists in person. Based on my own previous research and familiarity with these two cases, I chose these two sites because they offered unique opportunities to observe the activists directly in action. These sites allowed me to collect participant-observation data on the socio-demographics[17] and behaviors of the activists. While my analysis of the textual data provides insights into perceptions and frames of the movements, directly observing and participating in their activities

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[17] All demographic information was recorded as anonymized aggregate data in full compliance with IRB regulations.

gave me the chance to see more directly how they strategize to address the barrier of problem recognition.

At both sites, I presented myself honestly as a scholar-activist who supported digital rights and was conducting dissertation research on digital contention activism. For the EFA, I established my reputation as a member of the Student Net Alliance activist group.[18] For the MMM, I did not wear a mask because I wanted to see and communicate free of any obstruction during the event. I also wanted to have the flexibility to move freely between the marchers and the onlookers. Instead, I wore a t-shirt which bore the slogan "Team Internet" from the Net Neutrality protests in the hopes that it would show my credentials as a digital activist. At both events I was allowed to fully participate without any problems. In the EFA meetings, I logged into the video conference, introduced myself, and observed the presentations and discussions with the other participants. At the MMM, I walked side-by-side and interacted with the Anons even without a mask. While most marchers wore masks, not all did. Fortunately, my shirt was an effective symbol of my belonging in digital culture. In fact, when I first arrived at the National Mall in Washington DC on the morning of the MMM, I was immediately approached by an Anon who saw my shirt and asked if I was there for the march. I was even complimented on my shirt twice more by Anons during the day. At times, such as when the marchers arrived at the White House, I also hung back a bit in order to observe how onlookers were reacting.

I recorded detailed handwritten field notes during and immediately after each event, which I then typed up within 24 hours of my participation.[19] In the end, I had 32 pages of field

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[18] The Student Net Alliance was a network of university student groups opposed to surveillance and information gathering activities on college campuses. It was founded in 2014 in response to the Edward Snowden leaks regarding the mass surveillance programs of the US National Security Agency.

[19] This process was simple in the case of the EFA meetings because I was sitting at a desk at home in front of my computer. The MMM was more complicated because I was mobile. I carried a notebook with me that I wrote in during moments when the marchers stopped at various locations. I also followed the Facebook event page for the

notes from the EFA meetings and 25 pages of field notes from the MMM. The typed field notes were coded qualitatively and deductively using NVivo. Building from the findings of my analysis of the archival texts regarding frames and frame resonance, I coded specifically for information regarding the strategies and practices utilized by each group, particularly in relation to how, if at all, they worked to overcome the barrier of problem recognition. This process included examining what issues they addressed, how they were framed, the type of outreach they engaged in, the role of experts and/or crowdsourcing, and what audiences they targeted. These participant-observation experiences provided in-depth data regarding collective action dynamics and cultural patterns at work. Moreover, by directly comparing the two cases, I was able to uncover the contrasting dynamics within each. The next two chapters explain my findings in fuller detail.

Washington DC MMM, as well as #MillionMaskMarch on Twitter, for updates on my phone during these breaks (as did many of the other marchers).

CHAPTER 5: THE PERCEPTION OF POLITICAL OPPORTUNITY AND THREAT

The text mining and semantic network analysis of the text corpuses uncovered findings that offer empirical insights into the operations of these online movements. These findings were further triangulated and contextualized by the results of the qualitative analysis. Specifically, the analyses focus on how the activists perceived political opportunities and threats in digital space. I begin with the Digital Rights movement, first with the results of the computational analysis and then the results of the qualitative analysis. I then follow with the analyses of Anonymous. Then I conclude with a discussion of the meanings and implications of these findings.

Findings

The Digital Rights Movement

Text Mining and Semantic Network Analysis

The automated text mining of the Electronic Frontier Foundation's EFFector newsletters produced a list of 4375 of the most commonly occurring concepts. Only 2048 of these occurred twice or more, and 1308 three times or more. Such low occurrence suggests that these concepts hold less importance than those which occur with higher frequency. For example, there were a total of 339 concepts which occurred ten times or more within the corpus. **Table 1** shows the top 20 most frequently occurring concepts. From this list, we can already determine a great deal about the EFF organization. The high frequency of thematically consistent concepts such as *court*, *law*, *case*, *bill*, *record*, and *report* shows that their primary activity seems to center on

Table 1. Top 20 most frequently occurring concepts from EFF corpus.

#	Concept	Frequency	#	Concept	Frequency
1.	eff	302	11.	case	73
2.	privacy	162	12.	company	68
3.	government	137	13.	bill	65
4.	internet	127	14.	united_states	61
5.	court	113	15.	congress	60
6.	copyright	110	16.	data	57
7.	online	88	17.	track	53
8.	user	86	18.	record	52
9.	law	82	19.	report	52
10.	surveillance	74	20.	acta	49

legal action involving lawsuits and legislation, along with providing informative documentation and reporting. Terms such as *government*, *company*, and *congress* show the legal institutions on which they most frequently focused. Finally, terms such as *privacy*, *internet*, *online*, *user*, *surveillance*, *data*, and *track* appear to show the issues in which they were most commonly involved. Similarly, *ACTA* refers to the multi-national Anti-Counterfeiting Trade Agreement of 2011, which was designed to establish international standards for intellectual property and copyright law. This was a major focal point of protest and legal action for the Digital Rights movement and EFF during this time period.

To see in greater detail how these concepts relate to one another, I now turn to the semantic co-occurrence network. AutoMap initially identified 6424 co-occurrences
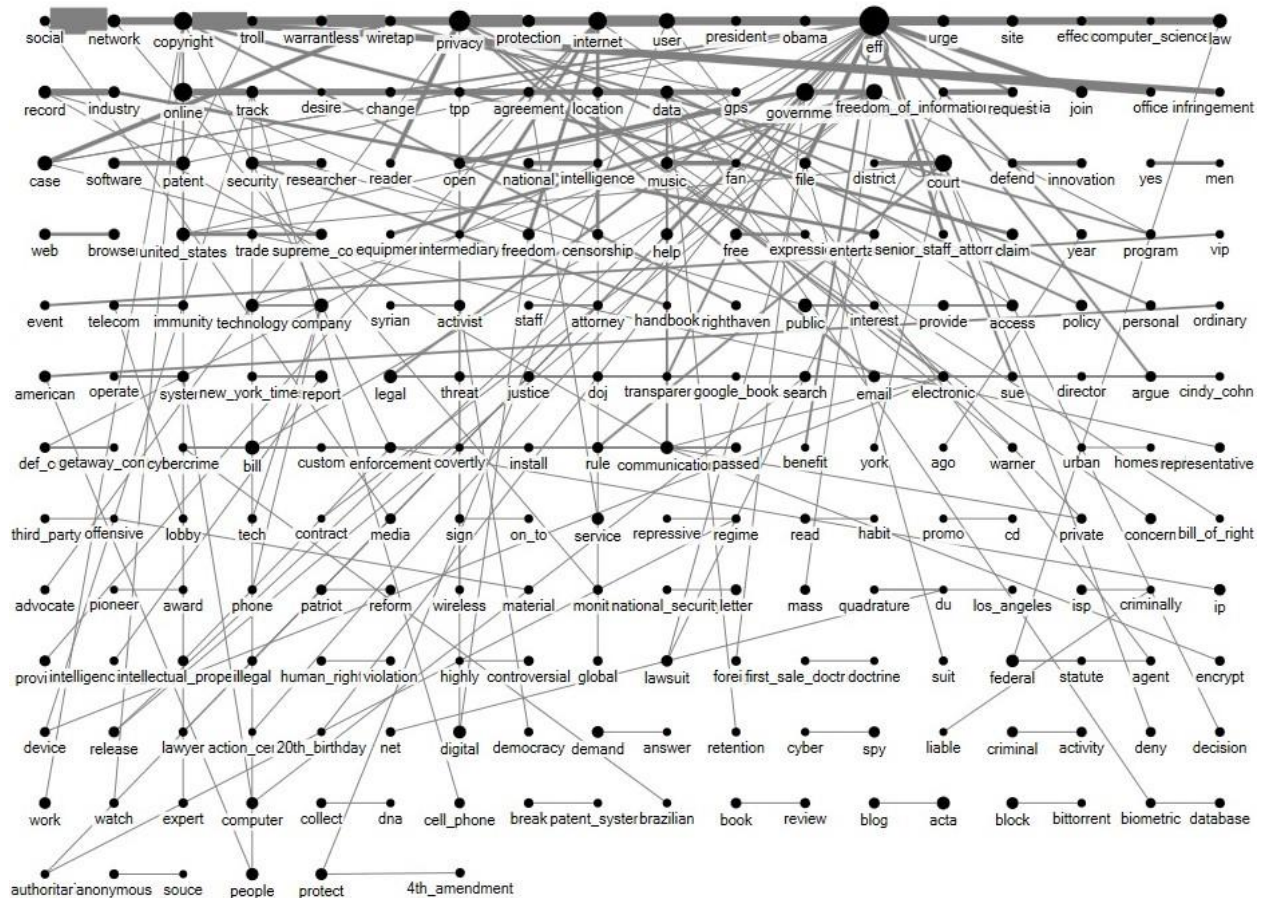
Figure 1. Semantic network from EFF corpus.

(represented as network ties), which was far too many nodes to reveal any meaningful patterns. As before, the majority of these ties occurred only once. There were 732 ties which occurred twice or more, and 199 which occurred three times or more. In order to reduce the noise in the data and focus on the most substantial semantic co-occurrences, I filtered out all except these 199 nodes pairs which co-occurred at least three times in close proximity in the text corpus. The resulting semantic network is shown in **Figure 1**. Each node was labeled with the concept it represents. The size of each node represents its degree, or the number of ties which connect to it, while the width of each tie represents the frequency with which the two nodes co-occurred.

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As we can see from this overall semantic network, the most frequently co-occurring concepts include *copyright* and *troll,* which combine to form a pejorative legal term defined as individuals or organizations who exploit loopholes in copyright law for profit by filing for legal ownership over public information or ideas (Sag and Haskell 2018). These also connect to the terms *watch* and *monitor* suggesting that copyright trolls are a potentially threating concern which the EFF must keep an eye on. Another of the largest ties is between the words *privacy* and *protection* suggesting that privacy is something EFF often views as under threat and in need of protection. *Warrantless* and *wiretap* is the next strongest tie, a reference to mass government surveillance and bulk metadata collection programs. While many of these connected concepts appear to suggest the perception of threat, others such as *government* and *freedom* are more difficult to discern from this level of analysis. For example, do they discuss government as a threatening entity from which they need to be freed, or could it be an example of cognitive liberation in which they see the government as acting on their behalf to protect their freedom?

In order to isolate specific topic threads for further analysis, NodeXL enables users to employ an algorithm which groups nodes into clusters; that is, to categorize groups of concepts in order to see more precisely how certain topics are framed. **Figure 2** shows the semantic network from the EFF corpus grouped by cluster.[20] In group 1, color coded in purple, *EFF* is the central node, which is most strongly tied to the words *urge*, *join*, and *help*, which implore support from its members. Other strong ties include *sue* and *argue*, along with *file*, which then connects to *suit* and *lawsuit*, as well as *request*, which then connects to *Freedom of Information Act FOIA*. Other strong ties that show up are *lawyer*, *senior staff attorney*, and *director Cindy Cohen*. These again reflect the legal action in which EFF frequently engaged. Interestingly, *EFF*

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[20] Clustering was done using the Harel-Koren fast multiscale layout, a default clustering algorithm built into NodeXL.

Figure 2. Semantic network from the EFF corpus grouped by cluster.
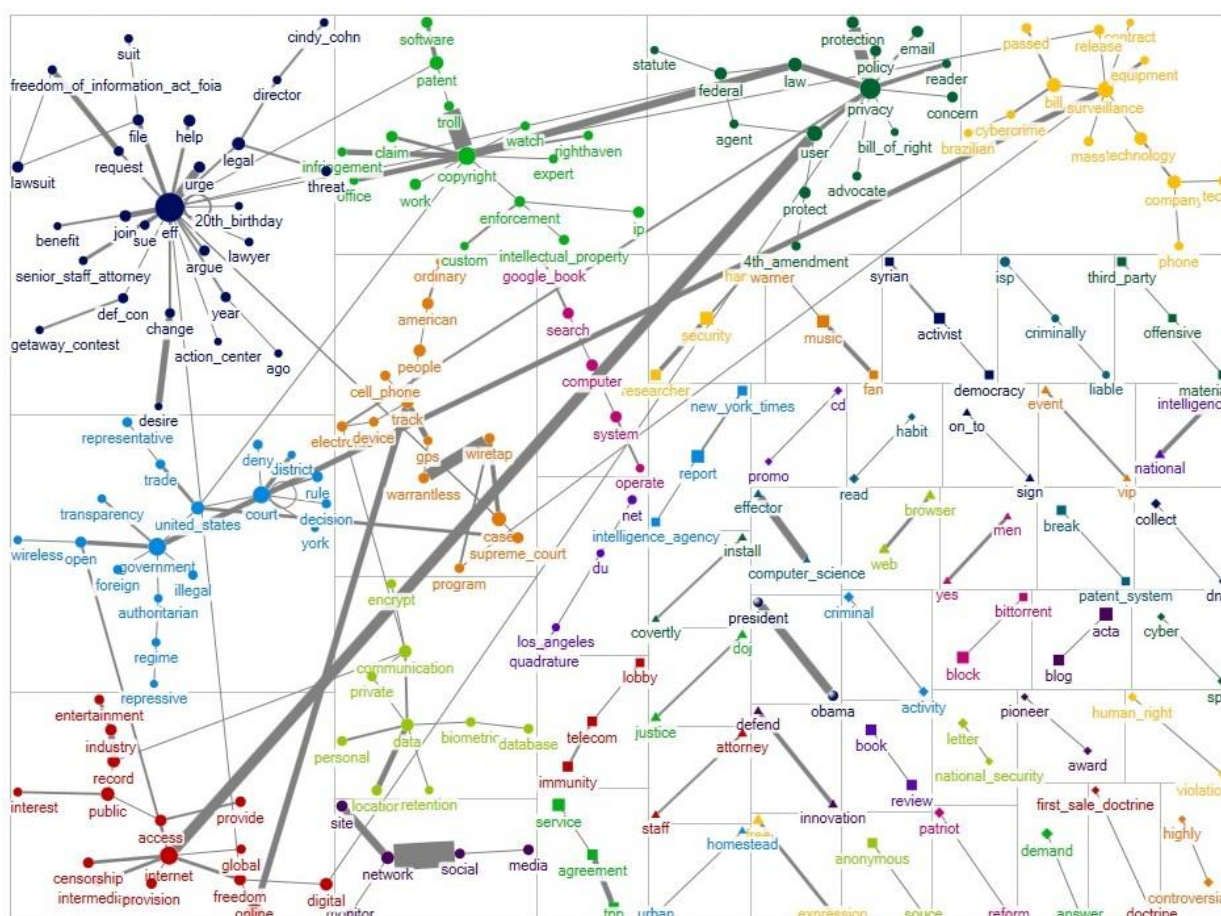
also connects to the word *legal*, which then connects to the word *threat*. Based on these results, it

appears that these activists commonly referred to their most central activities as fighting against

legal threats. Indeed, one of the strongest ties in this cluster was between the words *desire* and

change.

In group two (light blue), the most central node is *government*, which is no longer

connected to freedom, but instead connects with *surveillance*, *authoritarian*, *illegal*,

transparency, and *open*. These terms also unveil major themes in the EFF corpus, which appear

to associate government online spying and surveillance activities with illegal and authoritarian

actions, while simultaneously pushing for more openness and transparency in governance. Group

three (dark green) centers on *privacy*, which as stated before, strongly connects with *protection*. Privacy also strongly connects with *law* which then connects to *copyright troll* in group four (light green). We also see a strong connection to *user*, which then connects to *protect* and *4th Amendment,* a legal statute designed to protect people's right to privacy and freedom from unreasonable intrusions by the government. In addition, there are connections to terms like *digital*, *electronic*, *policy,* and *concern*. Again, we can interpret from all of this a certain sense of wariness and warning of the need to protect the privacy of individuals on the Internet. Although the connection between the terms *privacy* and *concern*, which suggests a perception of threat, is relatively weak, within the context of this cluster it appears to reinforce a similar meaning conveyed by the strong connection between *privacy* and *protection*. However, these interpretations thus far are limited in scope. The next section delves more deeply into the texts and provides greater context for understanding the meaning behind these concepts.

Qualitative Analysis

My qualitative analysis of the EFF corpus provided contextualization for the findings of the automated textual analysis and enabled me to see in greater detail how the organization specifically perceived and discussed political opportunities and threats. As described above, my coding primarily focused on any words or passages that show how the authors perceived political opportunities or threats; opportunities being openings in one's structural environment which can reduce the cost of collective action, and threats being forces which increases the cost of inaction. I coded a total of 18.44% of the EFF corpus for mentions of *Opportunity* and 34.81% for *Threat*. Political opportunities were referenced at least once in 36 out of the 41 newsletters, while threat appeared in all 41. Because each newsletter contained multiple short headlines and descriptions (at least twelve on average), it was not surprising to see both opportunity and threat appearing

multiple times in the same document. However, references to threat appeared nearly twice as often as opportunity overall. Below, I present key examples of passages I coded to exemplify the prominent themes that emerged.

Although less common than threat, political opportunity still played an important role for the EFF. Some of these references discussed changes to technology that have created broad, stable political opportunities for Digital Rights activists. For example, "Recent political protests in Iran, China, and elsewhere have demonstrated the enormous power of the Internet for organizing protests and reporting events to the world" (lines 459-461). This quote does not illustrate a specific opportunity for the EFF *per se*. Rather, it shows how technological advances have created openings for all types of rights activists to communicate and organize to advance their causes. This would represent a stable political opportunity (Gamson and Meyer 1996). Additional quotes further supported this theme of Internet technology as a stable opportunity recognized by the authors, such as, "Websites like YouTube have ushered in a new era of creativity and free speech on the Internet" (lines 877-878) and "The advent of advanced communications technologies offers an opportunity to improve responsiveness and accessibility…" (lines 2319-2320).

The texts also revealed that, unlike Anonymous, EFF was highly active both online and offline. In addition to many online forms of activism and mobilization, they also engaged a great deal with lawsuits and policy formation, which took place offline in courtrooms and other legal institutions. Most references to political opportunities in the EFF texts pertained to the legal system, such as favorable rulings in court cases or changes to policies or corporate practices which created new openings for the EFF and its allies to push for increased digital rights. For example, one passage stated, "Secretary Clinton's speech on Internet Freedom was an important

step in bringing online free expression and privacy to the forefront of the United States' foreign policy agenda" (lines 1361-1362). Here we can see how the actions of a politician helped advance support for digital rights in the federal policy arena. Alliances with elite political figures is a well-known form of political opportunity (Tarrow 1998).

Another passage described how an EFF member was able to use the legal system in California to convince the state senate to pass a bill to protect online privacy rights: "In another big step towards updating reader privacy for the digital age, the California State Senate Judiciary Committee passed through SB 602, the Reader Privacy Act, after hearing testimony from EFF Legal Director Cindy Cohn" (lines 2550-2552). These types of victories created new openings for digital rights activists and were often framed as "steps" because each was seen as an opportunity from which to build even more progress. But changes in policy did not necessarily have to be victories to be seen as opportunities. Often, perceived opportunities and threats were mixed together in the texts. As the next passage shows, activists framed a Congressional vote supporting a threatening bill as an opportunity to engage in more "meaningful" protest and reform: "Congress voted at the end of February to extend the expiring provisions of the USA PATRIOT Act, but only for three months -- giving liberty-loving citizens a new opportunity to continue to protest this dangerous law and demand the passage of meaningful PATRIOT reform before the end of May" (lines 2239-2241). Whether through support from elite allies, testimony from legal experts like Cindy Cohn, or protest activity from its grassroots members, the open legal system was at times seen and framed by the EFF as a focal point of opportunity to create social and political change.

While such legal opportunities are important for the EFF, mentions of perceived threats appeared with nearly double the frequency in the texts. These were typically framed as threats

that could take away the digital rights and freedoms of individual Internet users unless something is done to stop them. For example, in concurrence with the semantic network analysis, references to the threats posed by "copyright trolls" to individual Internet users made up the most common reoccurring theme, and fighting against them in court has been one of the primary activities of the EFF. This theme is clearly revealed by the following passage, in which activists described copyright trolls as "monsters" threatening digital rights: "Our movie industry has created some memorable monsters on screen. But Hollywood and the major music labels also helped create a very real kind of monster: copyright trolls who coerce settlements from Internet subscribers using intimidation and our out-of-whack copyright laws" (lines 3510-3512). Another commonly recurring topic identified by the automated analysis was ACTA (Anti-Counterfeiting Trade Agreement of 2011). The qualitative coding revealed that ACTA was commonly framed as a policy that, in effect, would act as a secretive form of censorship threatening people's freedom and privacy: "ACTA raises serious concerns about citizens' civil liberties and privacy rights. The contents and text of ACTA remain secret, but a document leaked to the public last year shows that ACTA could include stronger criminal measures, increased customs border search powers, and requirements for Internet service providers to cooperate with copyright holders" (lines 15-21).

Additional threats were mostly derived from government and corporate surveillance, such as wiretapping and data tracking, and other forms of censorship or oppression of Internet users, which were typically framed as threats to privacy, liberty, and/or freedom (of speech, expression, creativity, sharing, etc.). Such measures were not limited to the United States but were tracked by activists all around the globe. For example, "One of the provisions of the Media and Wiretapping Bill currently being discussed by the Italian Parliament threatens free expression

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and innovation in Italy" (lines 2980-2981). This passage shows how a proposed Italian bill was seen as a threat to digital rights because it would have expanded government authority to openly monitor and surveil the online activities of its citizens with little oversight. Similarly, "Australians are fending off threats to their right to privacy from all directions. First, there was Australian Attorney General Nicola Roxon's push to expand government online surveillance powers. Then the Australian Senate approved the Cybercrime Legislation Amendment Bill 2011, granting authorities the power to require phone and Internet providers to store up to 180 days-worth of personal communications data" (lines 3836-3840). This passage clearly states how these proposed policy changes from the Australian government were seen as threats to digital privacy. Threats of arrest and even bodily harm towards bloggers who are critical of government in authoritarian states also emerged as very serious threats in many countries, as exemplified by the following passage: "The intimidation and persecution of bloggers and online journalists is a grave threat to free expression in many countries these days. The effects are often far-reaching as bloggers are scared into silence. Bloggers from the UAE, Egypt, and Syria have all been threatened with prosecution this week" (lines 3029-3032).

From this qualitative analysis of texts, we can see that the EFF was a highly engaged digital rights organization that worked in the legal field and organized collective action. As an organization, the EFF combined both online activism and offline legal action. While they perceived some important political opportunities in the technological and legal realms, they perceived threats even more frequently.

Anonymous

Text Mining and Semantic Network Analysis

Table 2. Top 20 most frequently occurring concepts from Anonymous corpus.

#	Concept	Frequency	#	Concept	Frequency
1.	Anonymous	185	11.	egypt	37
2.	Freedom	96	12.	Free	33
3.	Citizen	87	13.	free_speech	32
4.	the_people	81	14.	support	31
5.	People	68	15.	Arab	30
6.	Government	53	16.	internet	28
7.	Fight	45	17.	action	27
8.	Time	44	18.	tunisia	26
9.	Protest	42	19.	Help	25
10.	Member	40	20.	Law	25

The corpus of press statements from the Anonymous subgroup AnonNews was smaller than the EFF corpus. Automated text mining initially produced a list of 3101 concepts, 1122 of which occurred two times or more, and 690 of which occurred three times or more. There was a total of 119 concepts which occurred ten times or more within the corpus. **Table 2** shows the top 20 most frequently occurring concepts. Like the EFF corpus, the most common concept is a self-reference. We can also see that the concepts *freedom*, *free*, and *free speech* all appear with high frequency, revealing the primary values of the movement. Additionally, we can see that *the people* and *people* are very high on the list as well. I chose to code *the people* as an NGram

because I observed that this specific phrasing was used very commonly in the press statements, typically in the form of "We, the people" or "Anonymous, the people". This shows how Anons often framed themselves as the universal voice and defender of the masses. Uses of the word *people* without *the* preceding it were mostly in the context of specific groups such as "people of Egypt," "Arab people," or something similar.

This phrasing appears to recognize a difference in the conceptualization of peoples. For example, during the Arab Spring uprisings, Anonymous played a supporting, but clearly outsider, role. As the qualitative analysis will show, phrases such as "People of Tunisia, Anonymous has heard your calls for help" exemplify this notion. Similarly, the terms *citizen*, *Egypt*, and *Tunisia* also appear frequently. *Government* is another common concept, referring to the governments which were commonly the targets of Anonymous hacking campaigns. Notably, there are also a number of action-oriented concepts here, such as *fight*, *protest*, *support*, *action*, and *help*. This finding shows how Anonymous was most of all focused on collective action and mobilization rather than deliberation or bureaucratic organizational functions. *Time* also appears on the list, suggesting motivational frames of urgency in their statements.

The semantic network for the Anonymous corpus generated 1756 co-occurrences of concepts, 74 of which occurred twice or more. Due to the smaller size of this corpus, and the smaller number of co-occurrences, I chose only to filter out those which concept pairs which only occurred once. Therefore, this semantic network has a total of 74 ties representing all concepts which co-occurred at least twice. Each node is labeled with the concept it represents. Like the EFF corpus, the size of each node represents its degree, and the width of each ties represents the frequency with which the two nodes co-occurred. The resulting semantic network is shown in **Figure 3.**
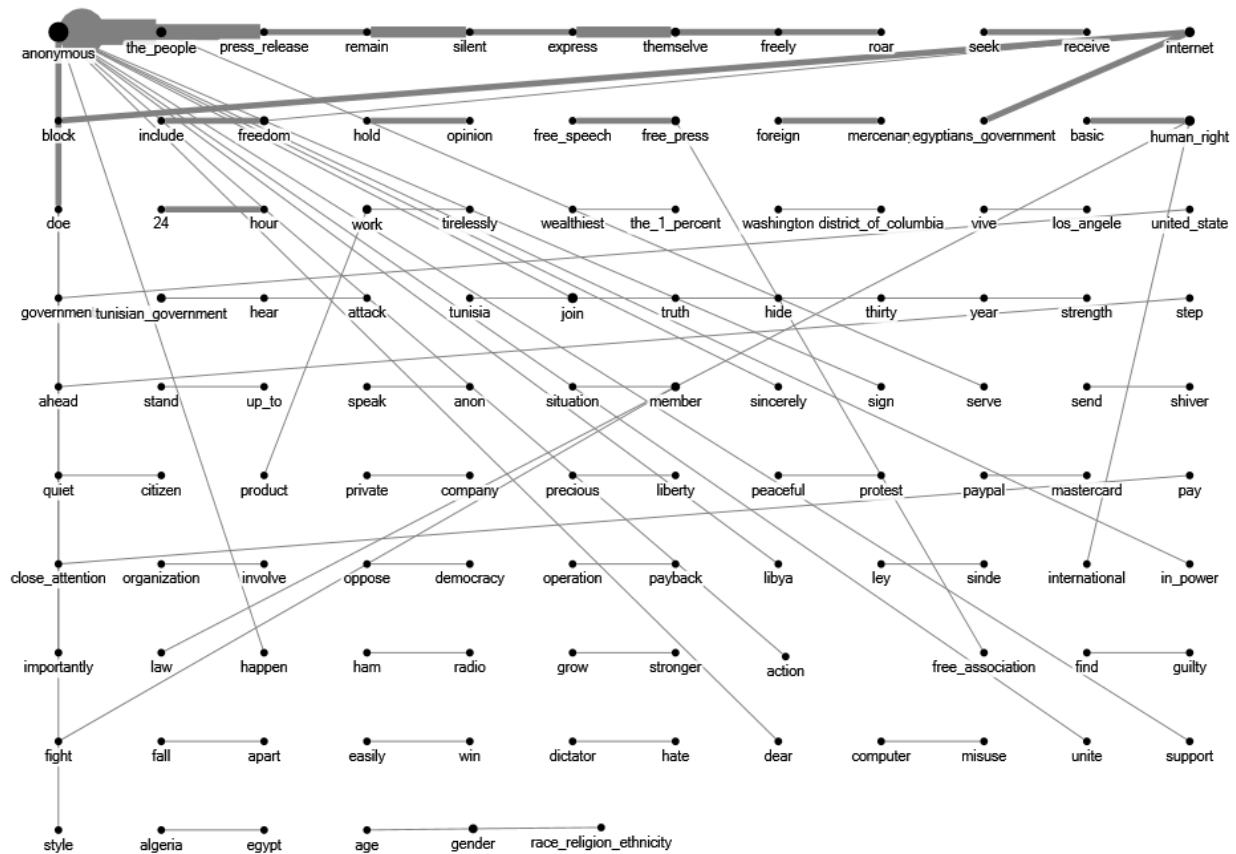
Figure 3. Semantic network from Anonymous corpus.

The strongest tie we see in this semantic network is between *Anonymous* and *the people*. We can also see strong connections between *remain* and *silent*, and *express* and *themselves*, which continuously connect to *freely* and *roar*. This theme is possibly the strongest in the automated analysis of the Anonymous statements. Anonymous appeared to identify itself with the masses of people, and through Anonymous they would no longer remain silent, or in other words be victim to censorship and oppression, but would instead express themselves freely and boldly. This theme plays into the way Anonymous framed itself as an empowering protest platform which fights for the freedom of people against those they perceived as threats to said freedom. For example, we can see that the concept of *liberty* is tied to *precious*.

Figure 4. Semantic network from the Anonymous corpus grouped by cluster.

As before, I further organized the network into clusters to analyze individual topic

threads, as shown in **Figure 4**. One of the foremost clusters at the time of this sample is shown in

group two (light blue) as *Internet* tied to both *block* and *Egyptians government*, as well as to

freedom and *include*. This cluster most likely represents when the Egyptian government shut

down Internet access for the entire country during the Arab Spring protests in early 2011. For

Anons, who see freedom and free speech as paramount values, especially in digital space, this act

was seen as the most egregious of threats and led to significant support for the Egyptian

protesters and targeting of Egypt's government by Anonymous hackers. *Tunisian government* is

also visible in group five, connecting to *attack* and *hear*. This cluster is a reference to the Arab

Spring uprisings in Tunisia. The statements spoke commonly of the Tunisian government refusing to hear the will of the people, which was calling for the resignation of its leader Ben Ali. Instead of listening, the government initially attacked its own people and attempted to oppress protesters with violence. The combination of *thirty* and *year* is a direct reference to the period of Ben Ali's oppressive reign over the Tunisian people. Group three also shows there were frequent uses of *basic human rights* and *international law*, again most likely referencing the violations being committed by the Tunisian, Egyptian, and Libyan governments against their own people during this time.

Other perceived threat themes also feature prominently in the network, including *foreign mercenaries*, *the wealthiest 1 percent*, and *Washington DC*. We also see connecting concepts of threat such as *hide truth*, *oppose democracy*, *fall apart*, *send shiver*, *find guilty*, and *hate dictator*. But empowering concepts can be seen as well, such as *stand up to*, *step ahead*, *grow stronger*, *work tirelessly*, and *win easily*. While Anonymous appears to focus a great deal on threats to freedom, they also promote a vision of strength through unity and the collective power to overcome such obstacles. Such messages are necessary for a social movement to motivate and convey efficacy of collective action; however, there are no references to any specific structural opportunities. Surprisingly, there were very few references to technology as well -- at least not frequently enough to show up in a clear pattern in the automated analysis.

Qualitative Analysis

Next, I will present the results of my coding of the Anonymous corpus. I coded 7.3% of the total text for *Opportunity*, whereas I coded 23.62% of the total text for *Threat*. Threat was coded at least once in 44 of the 50 documents, whereas opportunity only appeared in 25 out of 50. In contrast to the EFF texts, the Anonymous press statements had a different format and each

focused on one issue at a time. Thus, the proportions were lower, and it was less common to see both opportunity and threat appearing in the state document. Below, I present quoted passages which best exemplify the themes that emerged from my coding.

Perceptions of political opportunities, although present, were rare overall. They mostly focused on stable political opportunities, such as broad shifts in the global, economic, and technological landscape which had helped enable Anonymous' actions. These sentiments were typically presented in general statements which described advancements in Internet technology as a unique historical opportunity for activism and social change. For example, one passage described the development of the Internet as a major opportunity for freedom, "No media in history of man is more independent than the Internet. It's a fantastic victory for freedom (lines 463-464)…Since its inception, the internet has provided new ways for people all over the world to exercise the rights of free speech, freedom of the press and freedom of assembly" (lines 488-489). Another passage described how Internet technology connects people around the world in a whole new way by overcoming traditional barriers to organizing: "With the advent of the internet in general, and network infrastructure and peer-to-peer computing in particular, society – and the way it is organized – has undergone a dramatic change, the consequences of which are not yet completely visible. With this technology has come the first true opportunity to access, share, discuss, and produce information anywhere and anytime, transcending previous boundaries of locality and temporality, as well as certain socio-economic limitations" (lines 1438-1442). In another statement, the authors described how they believe this technology can lead to social change like never before, "technological achievements and IT-literacy gave us the means to be one step ahead on those who take these rights away from us. We, the people, have the tools now

to fight for our freedom. For the first time in history, we, the people, have the power to establish true democracy" (line 115-119).

There also occurred in the corpus no less than four references to the Universal Declaration of Human Rights (UDHR), which was adopted by the United Nations in 1948. This commonly appeared along with similar references to basic human rights and international laws as justifications for defending the rights and freedoms of individuals against oppressive and threatening forces, such as authoritarian governments. It contains, among other rights, the declaration of the right to free speech and the right to protest. This declaration appeared to be perceived as another important stable political opportunity, as shown in this passage: "The Universal Declaration of Human Rights is a statement of the guiding principles agreed by nations in the aftermath of World War II, and inspired by the idea that such barbarism could only be avoided in the future by recognising as innate and inalienable certain rights which naturally attach to all human persons by reason of their humanity… It took twenty years of arguing across the iron curtain to reach agreement on encoding the UDHR's principles into binding law in the form of two international treaties" (lines 978-981). The following quoted passage from article 19 of the UDHR, for example, appeared in an Anonymous statement justifying their opposition to the oppression of protesters in Tunisia during the Arab Spring uprising, "Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers" (lines 607-609).

Other opportunities came in the form of perceived support from the media. For example, in a statement in early 2011, Anons directly addressed members of the media. "You [the media] were intrigued by us when we took on the financial sector by attacking Visa, Mastercard, and

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Paypal as part of Operation Payback. Many of you became enamoured with us during Operation Tunisia and applauded our efforts. Some of you are now paying close attention to Operation Algeria. We know that we have gained support from even a few of you" (lines 522-525). Attention and support from the media can be a significant opportunity for activists to spread awareness and sway public opinion on issues. Another statement similarly addressed Al Jazeera for their dedicated reporting on the Arab Spring protests in Egypt, stating, "Thank you, Al Jazeera, for your outstanding coverage in the streets of Egypt. Your constant reporting and unbiased journalism has helped unite the revolutionaries, and the world" (lines 1332-1333).

Less frequently were references to smaller volatile political opportunities within specific campaigns. These included divisions among elites or state forces opposing protesters. For example, this passage from a statement about the Tunisian Arab Spring protests said, "Police officers were being held up by a crowd and kissed - some police had started changing sides" (line 825). Another passage about the Tunisian protests stated, "Anonymous would like to applaud the head of the Tunisian military - Rashid Ammar - for risking his personal security by refusing to fire on Tunisian demonstrators" (lines 1716-1719). These two quotes came from two different statements about Anonymous' Operation Tunisia in support of the uprising which began in late 2010. Police and military forces switching sides to support protesters can be a major opportunity. However, these quotes both referred to opportunities for the protesters in Tunisia rather than for Anons themselves. The corpus of Anonymous texts did not contain any volatile opportunities directly impacting Anonymous.

In contrast to opportunity, the perception of threat appeared far more frequently in the texts. Text describing threats comprised nearly a quarter (23.62%) of the entire corpus. Threats were primarily perceived as actions which censor or deny people of freedom, particularly the

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freedom of speech. For example, as one statement clearly put it, "Free Speech is the most fundamental of your fundamental rights. Once you lose it, you won't have the means to complain when politicians come back and destroy your wealth, your health, your soul, your ideals, your hopes, your projects, your whole life. Free Speech is the freedom that protects all freedoms" (lines 435-438). "Freedom of speech" appeared in nearly every one of the Anonymous statements. It was often equated with the freedom of the Internet itself, broadly construed as a platform of open communication, transparency, and information sharing. Freedom of the press, association, and expression were also commonly subsumed under this theme and were almost always presented in the context of being under threat from censorship and oppression. For example, "The future of the internet hangs in the balance" (line 91), "The trap of international censorship is desperately trying to swallow the Internet" (lines 459-460), and "…most human beings live under censorship - and you're next on the list, my dear Anon friend" (lines 478-479). This next passage shows exactly how Anons perceived online censorship as a threat, "Our aim is to force them to abandon censorship on the Internet. Censorship is stupid, harmful, dangerous, expansive, unuseful, pathetic. It stinks like hell. We treat censorship as a deadly enemy, a mental illness, as symbol of totalitarianism, a practice of power that must die painfully" (lines 307-310).

In other cases, threats were perceived as directed towards other groups, on whose behalf Anons were engaging. Anons clearly acknowledged their supporting role as outsiders in many cases. For example, one statement wrote, "ANONYMOUS has heard the cries for freedom from the Tunisian people and has decided to help them win this battle against oppression" (lines 345-346). As another example, in reference to a proposed law in Spain known as "Ley Sinde," a Spanish subgroup of hacktivists implored the Anonymous collective to help them by describing how the law will "not only restrict our fundamental rights (freedom of speech), but will also be

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committing an evident act of censorship" (lines 581-585). Last, this passage described how "Free-Thinking Citizens of the World" needed to come together to stop the Algerian government from oppressing its people. "The Algerian government hides the truth from its citizens and denies them free expression and access to information… Restrictions on the freedom of speech and denial of information to your citizens are in direct violation of the Universal Declaration of Human Rights, and cannot be tolerated" (lines 741-742).

Interestingly, there was no mention at all of cost involved with any of Anonymous' actions. There was only the perceived cost of inaction (i.e., threat). For instance, "ANONYMOUS therefore believes the Tunisian attempts at censorship are doomed to failure if only we, ANONYMOUS, the people, take up our individual responsibilities. For if only we decide to make it so - it will be done" (lines 350-352). Here they were saying explicitly that the censorship practices of the state would fail only if Anons acted to stop them. This was a clear call to action, not based on an opportunity, but on a perceived threat: If Anons did not act, then there would be nothing to stop this censorship, which they earlier described as "stupid, harmful, dangerous…" (line 307). This statement implied a cost of inaction. Yet, there was nothing said about the cost of action, in this statement or any other. It would seem that the cost of action was perceived as being so low by Anons that volatile political opportunities served no useful function for them at all. Instead, as I explore in greater detail in Chapter 6, the texts emphasized confidence and efficacy to express Anonymous' capacities. For instance, the following quote reflects the type of wording used throughout all the Anon statements, "We are not quiet. We are loud and when the people roar it quakes the foundations with which these Governments stand. We are Citizens and if we choose: We are Anonymous" (lines 252-255).

Discussion

These data have shown that threat appears to play a prominent role for both the Digital Rights and Anonymous movements. While some previous research has shown that threat can be a motivating factor for mobilization, especially under drastic circumstances of authoritarianism and oppression (Almeida 2003; Einwohner 2003; Einwohner and Maher 2011; Goldstone and Tilly 2001; Goodwin 2001; Maher 2010), the majority of social movement research has focused on political opportunity structures. For both movements of digital contention, however, threat appeared far more commonly than opportunity. Opportunity was virtually nonexistent in the frames of Anonymous. There was a small proportion of references to stable political opportunities, such as broad technological shifts and media support, but zero references to volatile opportunities directly affecting Anons. While opportunity appeared more so for the Digital Rights movement than it did for Anonymous, the corpus revealed perceptions of opportunity were primarily related to discussions of the EFF's offline activities in the courtroom and other legal institutions, such as by lobbying Congress or providing expert testimony in government hearings. Yet still, political opportunities appeared with only half the frequency as threat in the EFF texts. As a mobilizing factor, it was threat which was most called upon, perceived threats to the rights and freedom of Internet users.

These findings suggest the possibility that threat was used more commonly by these movements not because they were necessarily in dire circumstances or being directly oppressed, but rather because online activism in digital space is itself seen as so low-cost and low-risk for participants that opportunities simply hold less importance for them. Political opportunities are structural changes that lower the cost of collective action. But if the cost of collective action is already significantly lowered in digital space, as some scholars have theorized (Earl and Kimport 2011), then opportunities which lower it even further appear to have less salience as a motivating

factor. Instead, threat becomes the primary focus. This pattern would be especially true for the highly technically adept activists of digital contention who are most skilled and able to leverage the affordance of Internet technology and digital space to their advantage. But this pattern should hold true across all forms of online collective action. The more completely immersed in digital space a movement is, and the greater it can leverage the affordances of digital space, the less reliance it will have on traditional political opportunity structures.

However, it is also possible that other factors may contribute to this pattern. For instance, the emphasis on threat may be a result of recruitment efforts. If that were the case, a similar pattern should appear among all offline movements as well, for which further comparative research would be required. Additionally, the increased prevalence of perceived threats may be related to the "newness" of digital space itself. In other words, because the rules of this space are still largely unwritten, perhaps opportunities are less important than they would be in a more constrained physical space. As I discussed earlier in the dissertation, this newness is also a characteristic of digital space. Therefore, we can still see that digital space can have an important influence on the ways in which social movements operate, shaping the dynamics of collective action in new and unexpected ways. Greater research on this phenomenon can help elucidate the precise cause, or combination of causes, behind these changing dynamics.

Conclusion

This chapter has explored how social movement dynamics can function differently in the online space provided by the Internet. Through two online movements engaged in what I call *digital contention*, the Digital Rights movement and the Anonymous hacktivist movement, I examined activists' perceptions of opportunity and threat while operating in the digital sphere. I do so by drawing a sample of public texts from two movement groups, the Electronic Frontier

Foundation and AnonNews, to see how the movements perceive political opportunity and threat over a four-year period from 2009 to 2012. Through the analysis of text mining and semantic networks combined with qualitative coding of each text corpus, I showed that threat played a far more prominent role, especially for Anonymous. I argue that this pattern emerges due to the fact that collective action in digital space lowers the cost of participating, resulting in political opportunity losing much of its impetus as a motivational factor. Instead, threat has become the primary source of motivation for such movements.

In this dissertation, I set out to show how collective action is being shaped by digital space. The findings of this chapter show empirically one new way in which digital space is shaping movement dynamics in a manner different from what traditional social movement theory would lead us to expect, by reshaping the way activist groups internally perceive political opportunities and threats. In the next chapter, I continue this work by examining how these movements of digital contention communicate with external audiences by constructing frames and working to achieve frame resonance in the face of the barrier of problem recognition.

CHAPTER 6: FRAME RESONANCE AND THE BARRIER OF PROBLEM RECOGNITION

During the Net Neutrality protests of 2014-2015, knowledgeable and adept digital activists faced off against powerful Internet Service Provider (ISP) corporations like Comcast and Verizon over how the Internet would be regulated. The Federal Communications Commission (FCC) ultimately ruled in support of the principle of Net Neutrality,[21] but not before nearly two years of debate during which millions of grassroots supporters were mobilized on one side, and millions of dollars were spent lobbying against it on the other. The issue of Net Neutrality is one that impacts everyone who uses the Internet, although what became very clear during these protests is that many Americans did not understand what Net Neutrality actually meant.

While the term "network neutrality" has a catchy ring to it, behind it lies a series of nuanced and highly technical debates. Activists faced the challenge of explaining the issue in simple enough terms to be understood by non-experts and framing it as something relevant enough to everyday people to garner support for their cause. Net Neutrality advocates responded to this challenge by creating numerous online videos and articles utilizing a variety of experts and celebrities. The most famous video on the topic was a 13-minute segment on HBO's Last Week Tonight in which comedian John Oliver called on Internet trolls to, "for once in your lives, focus your indiscriminate rage in a useful direction" by submitting official comments to the FCC website.[22] The John Oliver segment led to a surge in comments, causing the FCC website to

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[21] Starting 2017 under the presidency of Donald Trump and the appointment of a new chairman, Ajit Pai, the FCC reversed many of its previous favorable rulings on Net Neutrality. This matter is currently undergoing several legal challenges.

[22] https://youtu.be/fpbOEoRrHyU (accessed (06-10-2020).

crash (Holpuch 2014). The campaign for Net Neutrality was the largest and most visible public

outreach in the history of the DR movement (Sasso 2015), yet despite all the movement's

framing efforts, ultimately it took a signal boost from a popular comedy news host to temporarily

amplify the message. Furthermore, the issue failed to elicit support from and become a unifying

theme among a wider range of civil advocacy and activist organizations outside of the DR

movement (Löblich 2015). While Net Neutrality appeared to resonate with certain segments of

the population, clearly knowledge and understanding of the issues of digital contention are not

ubiquitous throughout society.

Given that political issues surrounding the Internet frequently involve highly technical

aspects, I propose that two factors, the digital divide and the knowledge gap, create a barrier to

problem recognition by hindering some people's ability to understand the issues at hand. As

noted earlier, the digital divide refers to the social stratification of access to technology, while

the knowledge gap refers to the stratification of knowledge, in this case knowledge of digital

tools, digital space, and the ability to leverage the affordances of digital technology for the sake

of activism. The highly specialized social movements engaged in digital contention may thus be

more difficult to understand and access by outsiders, impeding these digital activists' ability to

achieve frame resonance and efficacy with wider external audiences. This phenomenon raises

interesting questions about how social movements engage in contentious politics over rights and

freedoms of the online realm. How, if at all, do digital social movements work to overcome such

obstacles? How do they construct frames to mobilize support from external audiences for such

technologically complicated issues, what audiences do they target, and who is possibly left out?

To address these research questions, this chapter comparatively analyzes two similar yet

independent social movements, the Digital Rights (DR) movement and the Anonymous (ANON)

hacktivist collective, which are both engaged in contentious politics over digital space and the rights and freedoms of entities operating therein, or what I call digital contention. My analysis draws upon four years of archival data (newsletter and press releases) from 2009 to 2012. While Chapter 5 analyzed these data in order to examine the perception of political opportunity and threat, this chapter focuses on how the groups construct collective action frames to reach out to and recruit potential supporters. In addition, I draw upon participant-observation data from two sites: first, the EFF's Electronic Frontier Alliance monthly online meetings starting in March 2016; and second, the Anonymous Million Mask March in Washington DC in November 2016. Together, these data provide insight into understanding how digital contention is shaped by the barrier of problem recognition and the framing strategies activists employ to overcome it. In doing so, this chapter reveals another new way in which collective action is shaped by digital space.

Findings

The Digital Rights Movement

Internet Freedom

As Chapter 5 showed, the Electronic Frontier Foundation's texts focused largely on perceived threats. In the course of that analysis, I also discovered that the statements about threat made use of framing, mostly in the form of diagnostic collective action frames defining problems and solutions. Specifically, threats were framed as forces (such as new government policies or corporate practices) that would take away the rights (primarily the right to privacy) and freedoms (primarily freedom from censorship) of the Internet and its users unless something was done to stop them. This finding shows how digital rights activists internally perceive their digital

environment, but how are these frames constructed to communicate and resonate with external audiences? Text analysis of the EFF corpus provided insights into this question.

First, the automated analysis showed (Chapter 5, Table 1) that the terms *Internet, online*, and *user* were among the most commonly occurring, ranking at fourth, seventh, and eighth, respectively, and the link between the terms *Internet* and *user* was one of the strongest in the entire corpus (Chapter 5, Figure 2). Further, the cluster analysis also showed that the terms most frequently linked to *Internet* were *freedom* and *censorship* (Chapter 5, Figure 2). Second, my qualitative analysis of the corpus revealed greater detail about the ways in which these terms were used. In particular, I found that the phrase *Internet user* was especially common through the texts, which shows how the EFF frames both the constituency they are defending and their targeted audience. For example, in regard to the anti-SOPA protests of 2011, one quote claimed, "since January's protests, Internet users have been clear and consistent about rejecting backroom deals that would undermine their online freedoms..." (lines 3403-3404). Another quote later in the corpus explicitly stated the author's intentions, "we're creating a movement of engaged Internet users and rallying them… we're advocating for what's best for the Internet and Internet users…" (lines 4049-4058). In fact, they frequently used the terms *Internet* and *Internet user* side-by-side or interchangeably. Next, the quotes, "the huge ramifications it would have for the future of the open Internet..." (line 3685) and "take a stand against ACTA -- the infamously secretive effort to curtail freedom on the Internet worldwide" (lines 1707-1709) show how the EFF activists framed the Internet as an open and free space to begin with, alongside their framing of Internet users as free individuals in operating in this space, under threat from forces like SOPA and ACTA which would undermine or curtail said freedom. This conceptualization of *Internet freedom* in reference to both digital space and its users was the dominant theme that

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emerged throughout the EFF's collective action frames and was coded one-hundred and twenty times in the corpus.

The presence of this frame is supported by additional research as well. For example, we can see a variation on this theme expressed in the slogan "Save the Internet" which was first popularized during the anti-PIPA/SOPA protests in 2011, continued in the anti-ACTA protests in 2012, and again later in the Net Neutrality protests starting in 2014 (Moon, Ruffini, and Segal 2013; Sasso 2015; Tomchak and Wendling 2016).[23] This framing strategy appears to have resonated with enough people to mobilize relatively large and successful online grassroots protests in some cases. For example, in 2011 the anti-PIPA/SOPA protests successfully halted these two proposed bills after several million individuals contacted lawmakers and signed online petitions, while a coalition of some of the most influential Internet businesses and non-profit organizations, including Google, Mozilla, Reddit, and Wikipedia, blacked out their websites for 24-hours on January 18th in support of the protests (Netburn 2012; Weisman 2012). However, these online mobilizations were only temporary and, like the Net Neutrality example at the beginning of this chapter, required major boosts from outside organizations to increase their visibility. Many other DR campaigns have failed to elicit nearly as much public attention or support. In practice, the EFF's frames alone appear to resonate primarily with a more limited audience, as I show below.

Frame resonance occurs in three ways: with narrative fidelity, empirical credibility, and experiential commensurability. First, its use of the *Internet freedom* frame shows how the EFF works to establish narrative fidelity. Although "freedom" is a widely used master frame among many social movements, the EFF limits it exclusively within the context of the Internet. The

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[23] Although this exact phrasing did not appear in the EFF texts, the cited research documents its use at protest events as well as among other DR organizations such as Free Press and the Free Software Foundation.

Internet freedom frame thus taps particularly into the cultural narrative of the Internet as an idealized free and open space, and the values of early Internet culture embodied in the "hacker ethic" (as described in Chapter 3). As such, this frame was constructed to appeal especially to those deeply invested and specialized members of digital culture for whom Internet use and technology are important parts of their individual identity. For example, we can see this cultural narrative in the name of all forty-one of the newsletters, "EFFector," which is itself a computer science pun that would be meaningless outside of a highly-technologically literate crowd. Overall, narrative fidelity was coded sixty-nine times in the corpus, such as in references to specialized cultural events. The most common is twelve references to the EFF's participation in the annual Black Hat and Def Con computer hacker conventions. In one case, they described a contest in which they gave away admission tickets by stating, "EFF would like the most enthusiastic digital rights EFFangelists to enjoy the world's premiere hacking event in style" (lines 2591-2592). Other events include the EFF's pub quiz trivia night, which invited "the Bay Area's sharpest legal minds from law firms, universities, and technology companies" (line 2780) to compete for a prize. As we can see, it was this subset of more specialized and knowledgeable members of digital culture for whom the EFF's narrative fidelity would more likely resonate.

Second, the EFF endeavored to build empirical credibility through its repeated use of technical and legal expertise. This was the most frequently used form of frame resonance and was qualitatively coded 164 times in the corpus. For example, quotes such as, "Experts from EFF will testify at public hearings held by the U.S. Copyright Office this month…" (line 3486) and "The Electronic Frontier Foundation… and other international copyright experts joined together today…" (lines 1053-1054) demonstrate how the EFF framed itself in terms of its own expertise, particularly by highlighting its reputation and influence in legal institutions and the policy-

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making arena. It also spotlighted its victories with lines such as "EFF successfully defended the free speech rights of a user facing a bogus lawsuit from a company criticized on a Yahoo! message board" (lines 1678-1680), and "Copyright trolls have faced resounding defeat at the hands of EFF lawyers" (line 2766), as well as awards such as "We're pleased to announce that EFF's Legal Director, Cindy Cohn, has won a 2010 Intellectual Property Institute Vanguard Award from the State Bar of California" (lines 1988-1990). Furthermore, they stressed the necessity of such expertise through the *Internet freedom* frame, in which both the *Internet* and *Internet users* were framed as being under threat and in need of protection (i.e., from surveillance, censorship, copyright trolls, and more). By emphasizing its highly specialized expertise and experience in these areas, the EFF strived to position itself as an especially qualified and credible organization to defend *Internet freedom* from the multitude of complex technical and legal threats facing it.

However, the EFF's framing strategy also stopped short of the third dimension of frame resonance, experiential commensurability; that is, frames that attempt to connect with the everyday experiences of average people. Experiential commensurability was coded seventy-two times in the corpus. In some ways, their framing strategy appeared intended to foster a general resonance among average Internet users. For example, there were twenty-three instances coded of digital tools and instructional materials that were framed to connect with everyday online experiences by referring to common activities such as blogging, web browsing, and tweeting (see the following section), as well as four instances coded of general phrases as the surveillance of "everyday Internet users" (line 3627) or the "privacy in your everyday life" (line 578). Far more commonly, the texts focused on the experiences of more high-tech specialized Internet users, such as "Security researcher arrested for refusing to disclose anonymous source" (line 2035), "A

federal judge in Vermont ordered a criminal defendant to provide his PGP passphrase so that prosecutors can examine his computer" (line 213-215), or "we learned Apple had stepped forward to support iPhone app developers who had found themselves threatened with patent litigation" (lines 2687-2688).

Overall, there was relatively little attempt to reach out to and resonate with the experiences of wider less-technically adept audiences. By focusing solely on technology (*Internet*) and individuals (*Internet users*), it effectively individualized movement participants, while also excluding those for whom technological expertise and digital culture was not already a major part of their own existing identity. While outside organizations and frames like "Save the Internet" may have helped temporarily boost resonance in certain major campaigns by appealing to a wider range of casual, average Internet users, movement frames did not actively foster these audiences as members of the Digital Rights culture in between campaigns on a regular basis. By excluding these audiences, they also gave the sense that such audiences were not needed as active participants in the movement. This limitation in framing may help explain why, as Löblich (2015) found, that issues like Net Neutrality have largely failed to appeal beyond their niche audiences and connect with broader movements and civil society.

Individual Efficacy

The individualization and limited frame resonance from the EFF was also evident in their use of prognostic frames to recommend solutions to perceived threats and motivational frames to mobilize supporters to petition, boycott, or otherwise protest over certain issues. Such calls for actions often involved the implementation of digital tools designed to enable individuals to support the EFF's activities. For example, "Use EFF's interactive tool to tweet at your U.S. senators using #DefendPrivacy. Show them all the unnecessary personal info this cyber spying

bill will collect on everyday Internet users" (lines 3633-3634) and "Educate yourself about the bill. We've prepared an FAQ about CISPA and our campaign against it. Use our new Congressional Twitter handle detection tool. Send an e-mail to Congress. Publish a statement on your blog or social networking site opposing the bill. We've got a sample statement available on our site for you to use. Make your opposition heard: write op-eds, blog articles, status updates or Tweets. And follow our Deeplinks blog and our microblogging on Twitter or Identi.ca for updates on the campaign" (lines 3381-3389).

As the quotes above allude, EFF promoted digital tools and online educational resources developed to be used as a form of direct action by individuals to learn about and create the online privacy and freedom of expression on their own. These tools and resources included personal security recommendations, such as, "EFF recommends that bloggers who are concerned about their security and safety post under a pseudonym, use Tor to prevent eavesdroppers from seeing the sites they visit and prevent websites from collecting data that might reveal their physical location, and use HTTPS to encrypt their private communications when possible" (lines 2918-2922). They also included educational resources, such as, "SURVEILLANCE SELF DEFENCE -- an online how-to guide for protecting your private data against government spying" (lines 121-123), designed to "educate Americans about the law and technology of communications surveillance and computer searches and seizures, and to provide the information and tools necessary to keep their private data out of the government's hands" (lines 124-128). Another resource was the "Who Knows When You Are"[24] informational guide to protect individuals' temporal privacy against location-based service tracking.

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[24] This title is a play-on-words referencing the temporal dimension of real-time GPS tracking.

From the perspective of Benford's "vocabularies of motive" (1993), motivational frames regarding the importance of problems (severity, coded six times), the need to fix them (urgency, coded three times), and a sense of moral responsibility (propriety, coded ten times) were quite infrequent in the texts. In contrast, the EFF most heavily emphasized motivational frames of efficacy (coded thirty times); that is, the effectiveness of taking action and the ability of that action to create a change. Frames of efficacy appeared three times more frequently than the others combined. Specifically, they emphasized a particular kind of *individual efficacy*, especially by creating and deploying the most effective tools and materials, which individuals may then use to protect and empower themselves from perceived digital threats. While these tools and materials could be efficacious in making individual Internet users more secure , the impetus was left completely to the individual to take such steps. In other words, the EFF team developed the tools and shared them through their newsletters, but in most cases one would have to already be an avid follower of the EFF to be aware that such tools exist. My analysis shows that the EFF's texts were largely written for a technologically savvy digital culture and do little to reach out and resonate beyond this highly specialized niche audience. There was an assumed base level of techno-political awareness required for individuals to seek out the EFF and discover these resources in the first place, which could likely exclude those unaware of or unconcerned with the issues of digital contention, including social groups on the other side of the digital divide and knowledge gap. Also, notably absent in the texts were any references to solidarity, collective power, or a community of support beyond the general framing of individual *Internet users*. As I show in the next section, this individualistic framing strategy might have a major effect on shaping the community of Digital Rights activists, yet at the same time the EFF

engaged in a strategically organized practice to amplify its diversity and inclusivity through networking together and learning from a variety of local activist groups.

Strategic Inclusivity

In addition to my analysis of the EFF documents, I observed six online monthly video-conference meetings of the EFF's Electronic Frontier Alliance (EFA) over six months. These meetings, organized by the EFF starting in March 2016, brought together activists and organizers from around the United States in an effort to build a new network of Digital Rights social movement organization. The activists met in an online video conference call to share information, strategies, and stories about their local campaigns and victories. Each meeting was led and organized by an EFF activist and included between 10 and 20 scheduled speakers from different activist organizations. There were approximately 30 to 40 attendees at each meeting, including the speakers. Each speaker and the group they represented typically specialized in a specific digital rights issue, such as both technical and policy issues around copyright, privacy, surveillance, policing, information security, and encryption. At one meeting, I heard a speaker from a New York-based group explain that they treat technical practices, like coding and encryption, as the defense, and legislation as the offense, in the fight for digital rights.

Based on my observations at these meetings, I was able to gain some insight into the makeup of the digital rights activist culture and community.[25] Out of a total of 204 attendees across all six meetings, almost all were young, urban, educated, and either college students or working in technology or technology-related legal fields. 163 (80%) were located in cities either

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[25] The videoconferencing software displayed each person's self-identified name and location, as well as their face and voice when they spoke. Additionally, routine protocol at the beginning of each meeting was for each person to introduce themselves and state where there were from and what organization, if any, they represented. Additional demographics were estimated based on appearance and self-disclosed information of individuals (for example, participants discussed their activist experiences as an African American or a student at a university).

on the West coast (e.g., San Francisco, Los Angeles, Berkeley) or in New England (e.g., New

York, Washington DC, Boston, Philadelphia) areas, 37 (18%) were from Midwestern cities (e.g.,

Chicago, Baltimore, Denver, Austin), and four (2%) were in unidentified locations. 151 (74%) of

the attendees were men and 53 (26%) were women (including two self-identified transwomen).

Only 33 (16%) were non-white. These findings are consistent with what the literature suggests in

terms of the first and second level digital divide (see Chapter 2). The first level focuses on which

social groups have greater access to digital technology, while the second level focuses on

technological knowledge; in other words, which groups are better able to put that technology to

use in meaningful ways and get the most value out of it. My observations confirm that these are

not merely average Internet users, but specialists highly educated (or in the process of being

educated at a university) in Internet technology-related fields. Moreover, it is the more privileged

social groups (white, young, urban, and educated men) that are primarily represented among

these digital rights activists, which research has shown possess the most knowledge of and

receive the most value from Internet use. As noted earlier, previous scholars have also argued

that, despite its democratizing potential, the overrepresentation of hegemonic groups in digital

space may reproduce the same dynamic of power and domination as we see in the offline world

(Fuchs 2011; Morozov 2011). Therefore, we can now see how the EFF's framing strategies have

shaped this community of activists. By focusing on individualistic and highly technologically

literate audiences, their frames are most likely to resonate with more elite and privileged social

groups and thus latently reify these disparities in digital rights activist culture.

Although we can see the social inequalities at work among the digital rights culture, we

can also see how through the EFA network these activist groups work to devise inclusive

strategies, or what I call *strategic inclusivity*, to specifically target less privileged groups. The

meetings were led by an EFF lawyer specializing in community organizing and policy reform whose stated goal was "connecting people across diverse ideologies and identities." In four out of the six meetings I observed, invited speakers specifically addressed issues of inequality, especially in terms of race, ethnicity, and class. For example, one of the predominant outreach methods of digital rights activists was the organization of "hackathons" and "crypto parties" which teach beginners the basics of coding and encryption techniques. While most of these were hosted on college campuses, there were also two examples of such events intentionally hosted in less privileged neighborhoods, including Harlem in New York and Skid Row in Los Angeles. Additionally, in one meeting an organizer from the group Color of Surveillance gave a presentation titled "Beyond MLK and Black Lives Matter" about how surveillance disproportionately impacts communities of color. The speaker emphasized how this issue goes beyond privacy by being part of a long history of recurring discriminatory abuses. In another meeting, an activist from Chicago discussed how data driven law enforcement uses "heat maps" based on secret algorithms to target low income communities of color. In the final meeting I attended, a speaker from the Stop LA Spying Coalition spoke about how, by using algorithms based on historical data, predictive policing reinforces existing biases. This presentation was part of the group's Data Justice Project, which investigates how government surveillance practices are used on people applying for social welfare benefits. The speaker described specifically how the coalition formed focus groups with undocumented day laborers and families, the homeless, and activists from intersectional feminist groups to hear about how people encountered police, what their needs were, and to engage them as allies working alongside each other.

As I have shown, the EFF's framing strategies in its texts, particularly its use of the *Internet freedom* frame and its emphasis on motivational frames of *individual efficacy*, appear to

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have achieved a limited frame resonance which effectively excluded less privileged social groups. Despite the rhetoric of the Internet being a free and open space for all, the EFF and the Digital Rights movement more broadly have built an activist community primarily for technological elites. In an attempt to compensate, the EFF has sought to devise specific strategies to grow the diversity of their movement in order to, albeit indirectly, increase their influence and message resonance beyond their core niche activist community. The formation of the EFA network shows its efforts to build a more diverse coalition through the practice of *strategic inclusiveness*. These efforts include the hosting of training and educational events in low income minority neighborhoods, focus groups designed to listen to and ally with underprivileged groups and intersectional activists, and presentations designed to educate and inform other activists within the Digital Rights movement on how privacy and technology issues combine with socioeconomic inequalities. Even though the effectiveness of this strategy to create a more inclusive digital rights activist community and culture is beyond the scope of this study, it does show their awareness of this issue and how they attempt to address it as a formal organization. However, their efforts do not address the root inequalities at the heart of the digital divide and the knowledge gap, and thus their strategies for inclusion may still indirectly reify some of these larger structural inequalities. Building an external network around the EFF to connect with activists from underprivileged social groups may help add some diversity to the Digital Rights movement, but it does not change the core community of the movement. In the next section, I contrast these findings with the very different approach of the Anonymous collective.

Anonymous

Freedom of Speech

In Chapter 5, I demonstrated that, similar to the EFF, the AnonNews corpus of press statements showed that Anons perceive threats far more frequently than opportunities. However, this pattern was even more pronounced for Anonymous. There were only a small number of references to broad political opportunities resulting from innovations in Internet technology, and a complete absence of any mention of volatile political opportunities directly affecting Anons. The only perceived volatile opportunities which appeared in the corpus were those affecting other groups of people, external to the movement, on whose behalf the Anonymous collective was rallying. Meanwhile, talking about perceived threats made up nearly a quarter of the entire corpus. In their diagnostic collective action frames, the AnonNews statements described these threats mainly as governments, or less frequently large corporations, who were in some manner acting to oppress (through some form of censorship or violent repression) the freedom (primarily freedom of speech) of their citizens. How then do Anons use these statements to achieve frame resonance with external audiences?

The text analysis of the AnonNews corpus provided insights into what type of audiences Anons target and the framing strategies they use to resonate with them. The automated analysis revealed (Chapter 5, Table 2) that the terms *citizen*, *the people*, and *people* all appeared with very high frequency, ranking the third, fourth, and fifth most commonly occurring terms, respectively. *Government* also ranked highly, at sixth, and *member* at tenth. Additionally, we can see that the terms *Egypt*, *Arab*, and *Tunisia* ranked eleventh, fifteenth, and eighteenth, respectively. In the qualitative analysis, it became clear that these terms reflected the audiences being addressed in the Anonymous statements. For example, forty-three of the fifty statements were written in the

form of a letter addressed to a specific audience. Appearing fifteen times, the most common form

of address was, "Dear citizens of the world" (line 333) or some variation thereof, such as "Free-

thinking citizens of the world" (line 734) or "To the people of the world, free and otherwise"

(line 1595). Eight were directed towards people of specific countries, such as "Dear Citizens of

Tunisia" (line 696) or "To the Egyptian people" (line 1235). Eleven were directed towards

governments, such as "To the Algerian government" (line 670), "To the members of the United

States government" (line 1552), or more broadly, "Governments of the world" (line 1194).

Digging deeper into these statements, my qualitative analysis also showed that the

authors framed Anonymous in a broad populist, albeit revolutionary, manner. This framing was

apparent through the use of phrases such as "We, Anonymous, the people" the exact wording of

which appeared in twelve of the statements. As the automated analysis showed, the connection

between *Anonymous* and *the people* is the strongest tie in the entire semantic network (Chapter 5,

Figure 3). For instance, in one of their earlier statements they wrote, "We, the people, are

Anonymous and this is our declaration of existence. We are you, and you are us. We are the

masses, and the masses are us" (lines 100-102). As we can see, Anonymous attempted to reach

out to wide and diverse global audiences of people, identifying themselves as one with the

masses, including specific populations which were at the time engaged in mass protests or

revolutions against their own governments. In the statements towards specific regional

populations, they typically addressed them with support and even admiration, such as "Greetings

once again to the brave and beautiful people of Tunisia who continue to take to the streets

because they know that freedom is the most precious thing in the world" (line 811). Whereas, in

the statements addressing governments, the authors put their wording in a more threatening

context, such as "We, Anonymous, the people, announce that we will not tolerate acts of

violence towards Algerian citizens" (line 673) and "Oppressive governments of the world take this as a warning…" (line 358).

In addition to addressing large and diverse audiences, Anons also endeavored to create wide reaching frame resonance through their frequent use of the concept of freedom. As the automated analysis showed (Chapter 5, Table 2), *freedom* was the second most common term in the corpus, second only to *Anonymous*. *Free* and *free speech* were also ranked twelfth and thirteenth, respectively, and although it did not appear in the table, the term *speech* was ranked twenty-first. Furthermore, the cluster analysis of the semantic network (Chapter 5, Figure 4) showed the NGram for *free speech* was also most frequently connected with *free press* and *free association*. Next, my qualitative analysis revealed the context of all of these freedom-related terms in greater detail. In the qualitative analysis, I discovered that the concept of *freedom of speech* served as the dominant framing theme which I coded one-hundred and forty-four times in the corpus. For example, as one statement titled "The Ten Pillars of Free Speech" clearly put it, "Free Speech is the most fundamental of your fundamental rights. Once you lose it, you won't have the means to complain when politicians come back and destroy your wealth, your health, your soul, your ideals, your hopes, your projects, your whole life. Free Speech is the freedom that protects all freedoms" (lines 435-438). Or, as other statements wrote, "Protecting freedom of speech through launching attacks against institutions who act to suppress it would seem to be core business of Anonymous" (line 967), and "Attacks on the freedom of speech and information of your citizens will not be tolerated. Any organization involved in censorship will be targeted" (lines 355-357).

Values such as freedom of information, expression, association, protest, and the press were also commonly subsumed under this frame. For example, other terms like *free press* and

free association only ever appeared following *free speech*, such as in the following quote, "You will not be denied your right to Free Speech, Free Press, and Free Association and your right to an uncensored world of information provided by the internet" (lines 247-249). Additional statements used similar wording for other values such as, "freedom of speech and transparency" (line 143), "freedom of speech and information" (line 280), "free speech and information flows" (line 423), "freedoms of speech and assembly" (line 1396), and "free speech and dissent" (line 2044). As another example, in a statement graphically titled "What the fuck is freedom of speech, anyways?" the authors specifically define *freedom of speech* as a blanket term by directly citing Article 19 of the Universal Declaration of Human Rights (UDHR), "Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers" (lines 605-607). As these quotes illustrate, this concept of *freedom of speech* was always treated as the primary value before all others in the statements across all of the Anonymous campaigns in this four-year period.

The usage of this frame also helped Anons to build a sense of narrative fidelity (coded ninety-seven times) by tapping into a civil right with a long and important cultural history, particularly for North Americans and Western Europeans, but has also spread as a human right across parts of South America, Africa, and Asia thanks to the UDHR. While some of the statements made references to Western values and figures like Thomas Jefferson and George Orwell, others adopted the more global language of human rights. For example, by referencing the UDHR, these statements showed an intent to resonate with wider audiences beyond only Western cultures. At times, the frame of *freedom of speech* was also equated with the freedom of the Internet itself in the statements, or more specifically the freedom of information on the

Internet. In this sense, it shared some overlap with the EFF's frame of *Internet freedom*. Both tap into the master frame of "freedom" which has been utilized across numerous social movements throughout history. Yet, in contrast to the EFF, the Anonymous statements did not primarily focus on the Internet. Instead, they chose a movement frame based on a value with a more universalistic resonance that could easily mesh with the existing rhetoric of human and civil rights both online and off. Nor did the statement individualize their audience or ostracize less technically adept people, but rather only referred to collective peoples, both when referencing themselves and others.

In this way, Anons also worked to establish experiential commensurability through their broad populist appeals to wide and diverse audiences and universal values. Attempts to resonate with the everyday lives of people can be seen in phrases like "We, the people," "We are you," and "You are Anonymous" which appeared a total of one-hundred and thirteen times in the corpus. Furthermore, the authors attempted to resonate with the experiences of all activist and revolutionary minded individuals around the world by emphasizing the universality of *freedom of speech* and of all struggles against oppression, particularly through frame bridging and frame amplification (more on this framing strategy in the following section). However, the Anonymous statements failed to appeal to the remaining dimension of frame resonance, empirical credibility. While the authors spent much of their time writing about the importance of freedom and their hatred of censorship and oppression, the tradeoff is that they lacked an established sense of credibility and trustworthiness. As an ostensibly "leaderless movement" (line 501), Anonymous relied completely on spontaneous crowdsourcing for its knowledge and other resources. Therefore, rather than focusing on formal expertise and experience like the EFF does, Anons

instead attempted to establish their authority by emphasizing their collective strength and efficacy, as the following section show.

Collective Efficacy

Like the EFF, the texts of the AnonNews corpus heavily utilized motivational frames of efficacy (coded fifty-five times) to express Anonymous' capacities. Unlike the EFF, they also frequently combined these with motivational frames of propriety (coded eighteen times) to create a sense of ownership and responsibility among readers and obliging them to take part. While motivational frames of severity (coded eleven times) and urgency (coded seven times) were used as well, it was these frames of efficacy and propriety which appeared to play a particularly important role in motivating action in response to perceived threats. The following quotes illustrate this point: "Anonymous is the physical entity of the hivemind. It is a global consciousness, based on common sense and the belief that people actually are able to make decisions about their own life" (lines105-106), "If no one protects our interests, then we, the people, will protect our interests. For we are not brain dead like they expect us to be. For we believe in society. We believe in ourselves and we believe in you. We, ANONYMOUS, the people, are always one step ahead. Because we are young, alive and intelligent" (lines 170-173), "We are not quiet. We are loud and when the people roar it quakes the foundations with which these Governments stand. We are Citizens and if we choose: We are Anonymous" (lines 252-255), "We are the humble and innumerable protectors of free speech… we organize and we strike back all together, as hard as we can… You are starting to realize that we can strike hard, aren't you?" (lines 297-300), "We are the weapon designed to kill it, and we are extremely well-designed. We enjoy this fight. We are legion. We love you. We are you. Support Us" (lines 311-312), "Unity makes our power! The fight for freedom wants you now!" (line 689), and "WE

ARE ANONYMOUS. ANONYMOUS DOES NOT EXIST. YOU ARE ANONYMOUS. NOW

ACT" (lines 181-187).

At times, they also appear to have used frame alignment techniques. In particular, Anons

engaged in frame bridging (coded forty-nine times), or "linkage of two or more ideologically

congruent but structurally unconnected frames regarding a particular issue or problem" (Snow et

al. 1986:467), to attempt to connect their own movement frames with those of outside groups

and other "peoples" such as the people of Tunisia and Algeria during the Arab Spring uprisings.

For example, in multiple statements the Anonymous authors reached out directly to the people of

Tunisia during the Arab Spring uprising of 2011. One such statement wrote, "ANONYMOUS

has heard the cries for freedom from the Tunisian people and has decided to help them win this

battle against oppression (lines 345-346) … To the Tunisian people: We stand together and

united against this oppression. This is a battle which is waged, not just for you alone, but to serve

as a precedent and statement to the world. We unite to send a message that we, in fact, are not

simply quiet citizens who can be peddled and choked into submission. When forced to by the

threat of oppression, we can be loud as hell - and when the people roar it will send shivers across

the spines of all those who want to stifle our freedom and take our precious liberties away" (lines

363-368). Such passages show precisely how Anons attempted to align their values with those of

the Tunisian people who were protesting their government, and to connect their struggle with a

larger global struggle of freedom and liberty.

At other times, Anons relied on frame extension (coded thirty-four times), which is when

a frame is broadened to appeal to a wider audience or to recruit a new network that may not be

immediately ideologically congruent (Snow et al. 1986). They did so by calling broadly on any

"citizens" or "free people of the world" to support and join Anonymous, while also (as stated in

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the previous section) consistently framing themselves in such universal terms as "we, the people," or "Anonymous, the people" along with widely encompassing statements such as "we are you" and "you are Anonymous." For example, "ANONYMOUS is a banner under which any Citizen can fly. It is a banner that accentuates the bold and loud manner in which we as Citizens must act when we must. Most importantly, ANONYMOUS unites us all regardless of age, gender, race, religion, ethnicity, or place of birth. It unites us all and calls upon us as Citizens of the Free World… Yes, this means YOU are ANONYMOUS. You will not forgive. You will not forget. You will not be denied your right to free speech, free press, free association and your right to an uncensored world of information provided to you through the internet" (lines 257-263).

The Anonymous texts are replete with motivational frames of efficacy and propriety, as well as frame alignment techniques. Together, these frames and framing techniques play a crucial role in mobilizing the Anonymous "hivemind." In accompaniment with perceived threats (as shown in Chapter 5) put in the form of diagnostic frames, they have shown themselves to be form a potent formula for mobilizing hundreds of thousands of individuals to join Anonymous protest campaigns over past campaigns. They also show, in contrast to the EFF texts, how Anons strongly emphasize *collective efficacy*. Their frames of efficacy and propriety all focus on collective power and responsibility, while their frequent use of frame amplification shows how Anons strategically work to portray themselves as a fully free, open, and universalistic collective platform of protest, calling for any and all to join and framing themselves as one with the masses. Even when calling on other distinct groups in their frame alignment techniques, Anons still overwhelmingly call for unity and togetherness. To achieve this unity in practice, Anons again take a very different approach than the EFF. In the next section, I show how, rather than

strategically organizing efforts to reach out to specific underrepresented populations as the EFF does, Anons seek to create unity through the erasure of individual identity.

Communities of Anonymity

On November 5, 2016, I observed and participated in the Anonymous Million Mask March (MMM) in Washington DC. Starting in 2013, the MMM has become an annual protest event for Anonymous taking place simultaneously in hundreds of cities around the world (Gilbert 2014). According to a crowd-sourced map produced by Anons, the march took place in over 450 self-reported locations representing virtually every country in the world.[26] November 5 is significant for the Anonymous collective because it is also Guy Fawkes Day commemorating the namesake of the masks that Anons wear and have appropriated as a symbol of their movement. It is also one of the rare moments when Anons gather in public, instead of their preferred methods of hacktivism in digital space.

At the location I attended, participants coordinated online[27] to meet at the Washington Monument beginning at 10 am. After arriving, I spent about 30 minutes waiting for others to gather. Once a large enough group had accumulated, we decided to leave and find the main protest march, already in progress. We quickly proceeded down the National Mall and arrived at the US Capitol just in time to see the full march heading towards us down Pennsylvania Avenue. I estimated several hundred marchers at this time, almost all wearing Guy Fawkes masks and many carrying protest signs and/or wearing shirts with various slogans. Most shirts were solid black with some bearing references to other movements like Black Lives Matter or the 2016 Bernie Sanders campaign logo. Protest signs included slogans such as "Revolution = We're the

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[26] http://www.millionmaskmarch.com/map
[27] Through various platforms including IRC channels, Twitter, and Facebook event pages.

Solution," "Unfuck the World," and the classic phrases from the Anonymous press statements such as "We Are You, Join Us, We Are Legion." Several marchers carried smoke bombs emitting colorful smoke into the air while others waved large black flags with the anarchy symbol on them. Several individuals at the front shared a megaphone with which they led the group in a series of chants, including "Obama come out, we've got shit to talk about" as well as classic call-and-response protest rally chants such as "Hands up! Don't Shoot!" and "Whose Streets? Our Streets!"

The marchers arrived at the Peace Monument just outside of the gates of the Capitol building where they remained for the next two hours. During this time, the Anons congregated around the monument while people took turns speaking to the group with the megaphone. Many took this opportunity to sit, rest, chat, and even removed their masks. The air soon became pungent with marijuana smoke. A sizeable force of police officers in full riot gear were positioned shoulder-to-shoulder in a line standing between the Anons and the Capitol building, while a curious crowd of onlookers gathered around the outskirts of the area. Soon after the group arrived here, I witnessed one Anon who had lagged behind the rest get arrested for spray painting a Guy Fawkes logo with the phrase "Expect Us" on the sidewalk. Throughout the day, the march continued on to a variety of key locations, stopping for a period at each, including the White House, US Treasury, FBI Headquarters, and Trump International Hotel. Additional people continued to join the march, while others left, making the total number of participants at least 1,000 by my estimate, but possibly much higher.

The march revealed a highly diverse activist culture and community. Although I was unable to get an exact count of the group demographics,[28] I estimated a very evenly split

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[28] Even though most participants wore the plastic Guy Fawkes masks, they appeared to be hard to breathe in, especially on such a warm and sunny day as it was. The marchers frequently removed them, especially when they

proportion of men to women based on visible marks of gender identity. This was markedly different from the EFA meetings, which were disproportionately made up of men. Also, I observed at the MMM a greater age range. While I would still estimate that most of the protesters were relatively young (around 18-30 years old), there was a noticeable presence of middle and older age people as well. For example, one of the speakers on the megaphone was a medical doctor likely in his 50s-60s who gave a speech about the War on Drugs and the need to legalize marijuana. Last, I observed greater racial diversity in comparison to the EFA meetings. At least a quarter of the Anon protesters appeared to be non-white (most of these being African American) compared to only 16% of the EFA participants. Therefore, although we can still see some of the same disparities in the overrepresentation of certain privileged social groups (i.e., young and white) caused by the digital divide and knowledge gap, the Anonymous community appeared far more diverse than the EFA. This increased diversity was especially true in terms of gender, which opposes how some people have characterized Anonymous as being dominated by misogynistic men (see Grigoriadis 2011). Based on these observations, it could be claimed that Anonymous' focus on freedom and openness, and its more universalistic framing strategy, appears to resonate with more diverse social groups. Even though Anonymous is also a technologically oriented hacktivist movement deeply embedded in digital space, the greater diversity of its constituency stands in stark contrast to the EFA.

The Anonymous collective works to overcome the obstacles of the digital divide and problem recognition not only through its framing strategy, but also through its everyday practices. Particularly, Anons achieve this higher level of diversity and inclusiveness through their *communities of anonymity*. This practice originated in digital space, and online anonymity

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stopped and rested at the various locations, even if only partially or momentarily. Thus, I was able to use visual cues to make rough guesses about the crowd's age, gender, and racial/ethnic distribution.

is such a core value that it is literally the name of the collective, Anonymous. But it is more than just anonymity. The idea of Anonymous as a proper noun originated in 2006 in the online message board website 4chan when users began to joke that all of the posts attributed to "Anonymous" commenters were all actually from the same person (Beyer 2014; Coleman 2014). In this sense, the idea of Anonymous is that of a community in which everyone is seen and treated as the same person. Through this practice, they cease to be seen as atomized individuals, becoming instead members of a collective entity. This practice has even been extended beyond digital space into the face-to-face world, or what some hackers refer to as "meat space," through the wearing of identical Guy Fawkes masks, as I observed during the MMM. The Anons fully embraced this performative spectacle not only as an internal practice of community but also as a symbolic statement to outsiders, which was in my opinion the single most notable impression from the entire event.

As part of their practice of *communities of anonymity*, the Anonymous collective eschews any formal organization and leadership. Nonetheless, I observed how well the marchers worked together in an ad hoc cooperative manner, constantly coordinating through social media, ensuring that no single individual got too much attention or stood out too far from the group to be grabbed by police, and taking turns in various roles such as giving speeches, talking one-on-one with bystanders, and making decisions about when and where to move. There was no single individual who claimed to be the leader or organizer of the event, or who spoke more than the others. As part of this internal practice, the MMM presented a unified symbolic and performative impression as a community. Yet, at the same time their messaging in term of the issues about which they were protesting were at times scattered, confusing, and even contradictory. Freedom of speech still served as a main frame, but in practice this means freedom of *all* speech. As I

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observed, the protest signs, chanted slogans, and speeches ranged widely across specific topics including government corruption, economic inequality, the Federal Reserve and inflation, cryptocurrencies, the prosecution of Julian Assange, the War on Drugs, GMOs, the North Dakota Access Pipeline, and the Fukushima Daiichi nuclear disaster. At various points in the march I read signs or heard chants variously referencing Black Lives Matter, Blue Lives Matter, and All Lives Matter. There were even some more conspiratorial messages about fluoride in the public water supply, vaccinations, and chem trails, among others. Some of the Anons were openly militant and hostile, while others called for peace. Based on the reactions of observers, these conflicting messages created a great deal of confusion. Many of the observers appeared curious more than anything, drawn in by the spectacle. Some laughed and quickly dismissed the marchers, while others expressed genuine interest and got into deep discussions with Anons. Overall, my impression was that these bystanders were mostly struggling to figure out what that protest was actually about. For instance, in one exchange I overheard an Anon explaining to some observers that "We're the solution, we're fighting for your freedom." The observer replied, "But what are you trying to accomplish here today?"

The Anonymous collective's framing strategies, especially its use of the *freedom of speech* frame and motivational frames of *collective efficacy*, and its practice of *communities of anonymity* show its efforts to achieve a relatively wider frame resonance and build a more diverse and inclusive movement culture compared to the EFA. However, by making Anonymous an open platform for all voices, they invite not only more diverse participants but also more diverse viewpoints. Absolute freedom of speech can help boost the voices of socially marginalized groups, but just as well it can also boost the voices of all others, including fringe conspiracy theorists. As I observed in the Million Mask March, this condition can lead to frame

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competition and conflict within Anonymous, which then creates confusion among outside audiences and impedes greater frame resonance. Although the Anonymous collective has shown that it is very good at getting attention, in the absence of a coordinated message or any concerted collective effort towards establishing empirical credibility, they become merely a curious spectacle to many outsiders. The Anonymous collective appears to be at its most effective when it can focus on a specific issue or support an existing cause, such as opposing online censorship or fighting an oppressive dictator (Wright 2012; Wright et al. 2019). Otherwise, when unfocused, the "hivemind" becomes more like a swarm of bees all moving in different directions at once.

Discussion

How, then, have different digital movement groups addressed the frame resonance of issues with which they involve themselves? Based on text analysis of archival data and participant-observation, I show how the EFF uses the frame of *Internet freedom* and focuses on trying to achieve frame resonance in terms of narrative fidelity and empirical credibility, but not experiential commensurability. They also employ a framing strategy of *individual efficacy* in their attempts to reach out to and mobilize potential supporters. In this way, the Digital Rights movement appears to latently reify some educational and socioeconomic inequalities by being only accessible to a large extent by certain privileged groups in society. However, through the EFF's Electronic Frontier Alliance, they work to overcome these disparities by practicing what I call *strategic inclusivity*, developing specific targeted education and mobilization strategies relying on accredited experts and training workshops.

Meanwhile, the more informal and radical Anonymous collective uses the frame of *freedom of speech* and strives to achieve frame resonance in terms of narrative fidelity and experiential commensurability, but not empirical credibility. They also utilize a framing strategy

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of *collective efficacy* to rhetorically draw people to their cause by emphasizing collective

solidarity, unity, and strength. In practice, Anonymous utilizes a *community of anonymity* in

which all participants have an equal space to express their opinions. Its commitment to absolute

freedom and openness allows for greater accessibility resulting in a wider diversity of

participants, including from marginalized and outsider groups. However, its unregulated level of

inclusivity and total reliance on crowdsourcing for knowledge and expertise also results in a high

degree of frame conflict and a greater difficulty in achieving frame resonance beyond its core

constituency.

Conclusion

This chapter has engaged in a comparative analysis of how two social movements, the

Digital Rights movement and the Anonymous hacktivist movement, work to overcome the

obstacle of problem recognition in the arena of digital contention. I examined the framing

processes by computationally and qualitatively analyzing a sample of the activists' texts over a

four-year period from 2009 to 2012, as well as through participant-observation at two sites,

online monthly meetings of the EFF's Electronic Frontier Alliance network starting in 2016 and

Anonymous' Million Mask March in Washington DC on November 5th 2016. By contrasting the

two movements, I show how each of their respective framing strategies shape their movement

communities in different ways. I find that the Digital Rights movement's framing strategy

engenders a relatively more elitist constituency, which it works to counterbalance through a

formally organized strategy to increase its diversity. Meanwhile, the more radical and informal

Anonymous collective's framing works to create an all-inclusive constituency, which leads to a

much wider array of competing, and at times conflicting, messages.

These findings reveal an additional dimension by which social movements are shaped by digital space. As I have shown, these movements are faced with a specific obstacle of problem recognition due to their highly technological nature which limits the reach and resonance of their collective action frames. In turn, this limitation leads to activists devising framing strategies and practices in an attempt to overcome this obstacle and increase their frame resonance. While my findings show some important variations between the strategies of the two movements, it is particularly notable that both relied more heavily on motivational frames of efficacy than any of the other three vocabularies of motive for the task of action mobilization. In Chapter 5, I found that digital space can lead to a decrease in the perception of political opportunities and an increase in perception threats. It is thus possible that in turn digital space also necessitates an increase in the need for frames of efficacy to counterbalance the increased prevalence of perceived threats. In the next chapter, I discuss this possibility further as I present my final conclusions about my dissertation, including limitations and directions for future research.

CHAPTER 7: CONCLUSION

The goal of this dissertation was to explore how collective action operates in digital space, particularly for those social movements at the cutting edge of technologically innovative contentious politics. I did so by analyzing two leading digital social movements, the Digital Rights movement (DR) and the Anonymous hacktivist collective (ANON), who are both engaged in what I call *digital contention* with state and corporate institutions over the future of Internet policy and governance, or what some activists frame as "the freedom of the Internet." I used a combination of computational and qualitative analyses of an archive of online texts, along with participant-observation at meetings and protest events, to explore how certain collective action dynamics are changing in digital space. Specifically, these included how movements internally perceive political opportunities and threats, as well as how they constructed frames and seek frame resonance with external audiences.

Much of the extant literature on online activism has taken a narrow instrumental perspective of digital technology as simple a set of tools with particular affordances that can be used by any activists (Bennett and Segerberg 2013; Bennett, Segerberg, and Walker 2014; Earl and Kimport 2011; Gerbaudo 2012, 2014; Mattoni and Treré 2014; Tucker et al. 2016; Tufecki and Wilson 2012). While this line of work has produced valuable findings, there is a gap concerning the lack of attention to the cultural and structural influences of the digital realm as its own space. I began by laying out a theoretical foundation regarding the importance of physical space in relation to the public sphere and social movements. I then built upon this foundation to argue that the digital realm can be understood as a space with its own influence on political participation and collective action.

With this foundation established, the main focus of this dissertation was to empirically

examine two sets of research questions in order to illustrate particular ways in which digital

space has shaped collective action dynamics in ways that are different from what traditional

social movement theory would predict. These questions each address major areas of social

movement theory in new ways by asking how certain dynamics, specifically the perception of

political opportunities and threats and process of framing and frame resonance, operate in digital

space.

Findings

The Perception of Political Opportunity and Threat

First, I ask how activist groups internally perceive structural political opportunities and

threats in digital space. The concepts of opportunity and threat both refer to changes in the

broader structural environment in which a movement operates (Almeida 2003; Bob 2002;

Einwohner and Maher 2011; Goldstone and Tilly 2001; McAdam 1982; Tarrow 1998; Tilly

1978), and moreover, opportunities and threats must be perceived and interpreted in order to be

acted upon (Einwohner and Maher 2011; Maher 2010; McAdam 1982; McAdam, Tarrow, and

Tilly 2001; McVeigh 2009; Meyer and Minkoff 2004; Van Dyke and Soule 2002). Therefore,

how might the online environment of digital space shape the way activists perceive opportunity

and threat? Do they talk about opportunity and threat in the same way as activists in other spaces

do? For example, political opportunity structures are primarily theorized and understood as

operating at the national level (Bob 2002), whereas the Internet represents transnational space

over which no single governmental body controls or has ultimate authority and consists of actors

from many different national territories. How then might political opportunities and threats take on different meaning in such a space?

The relative power of opportunity and threat may also be different in digital space. There is still much debate in the social movement literature over whether opportunity or threat is a stronger mobilizing factor and under what conditions (Johnson and Frickel 2011; Shriver, Adams, and Longo 2015). Specifically, might threat become more salient for mobilization than opportunity when the cost of collective action is reduced in digital space? Moreover, activists in my two cases of digital contention are all operating concurrently in the same digital space, and thus all exist within the same structural context of what Gamson and Meyer (1996) would call stable political opportunities and threats. But might the perception of opportunities and threats vary between the two movements as well?

My findings show that, for both movements of digital contention, threat appears with much greater frequency than opportunity in the texts. For the DR, perceived threats were discussed with double the frequency as opportunities in the entire corpus. While political opportunities were present, they primarily were related to discussions of the EFF's offline activities, such as courtroom legal proceedings, testimony in government policy hearings, or lobbying to Congress and other officials. Activities regarding digital space more often appeared connected with threats. This pattern was even more pronounced for ANON. The corpus of AnonNews texts revealed no discussions of volatile political opportunities directly impacting Anons, and only a small proportion of mentions of stable political opportunities referring to broad technological shifts or media support. Perceived threats appeared with more than three times greater frequency than opportunity in the AnonNews corpus.

Previous research on online activism has shown that the affordances of digital technology can lower the cost of collection action (Earl and Kimport 2011). Therefore, I contend that this factor helps explain why political opportunities appear to have such low salience for mobilization among the cases in this study. For digital contention activists who are highly skilled and adept at leveraging these affordances to their advantage, political opportunities which further lower the cost are not perceived with the same level of importance as they would be for traditional social movements. Instead, the activists rely more on threat to motivate and mobilize collective action. In sum, I theorize that the more immersed in digital space a movement is, and the more capable it is of leveraging the affordances of digital space, the less it will perceive traditional political opportunity structures and the more it will perceive threat. However, as discussed in Chapter 5, it is possibly that other factors may also contribute to the pattern in my findings, and additional research is required to test these alternatives.

Frame Resonance and the Barrier of Problem Recognition

Second, I ask how the activists in my cases construct framing strategies to address the knowledge gap and digital divide. This set of questions addresses the framing processes, or the "meaning work" that is performed by social movements (Benford and Snow 2000; Goffman 1974; Gamson and Wolfsfeld 1993; Johnston 2002; Snow and Benford 1992) and the extent to which collective action frames ring true or "resonate" with external audiences (Johnston and Klandermans 1995; Snow and Benford 1988; Snow 2004; Snow et al. 1986). Research has shown that access to technology is not evenly distributed around the world or even within advanced societies (Anderson and Kumar 2019; Tilly 2004; Tomer and Kane 2015). This phenomenon has led to a gap in people's knowledge regarding how to engage with digital technology in meaningful and rewarding ways (Hargittai and Hinnant 2008; Schradie 2018,

2019; van Deursen and Helsper 2015; Warf 2018; Warschauer 2004). Given that the technology and related political issues around digital space frequently involve highly technical aspects, and that the contention over digital space is itself frequently obfuscated from public view, it is thus arguable that the digital divide and the knowledge gap have impeded external movement audiences' ability to understand the problems at hand. I define this phenomenon as the barrier of problem recognition. Therefore, how have social movement organizations worked, if at all, to address the barriers presented by the digital divide and the knowledge gap in order to communicate and resonate with wider external audiences? Furthermore, do the two movements employ different framing strategies, and if so, how does this shape their respective activist communities?

In my comparative analysis, I discovered that each of my cases have developed distinctly different framing strategies. The EFF texts attempted to create frame resonance in several ways. First, they utilized the frame of *Internet freedom* to describe their vision of an idealized digital space and its users. They used this frame to tie together many different issues and campaigns into a unified narrative of being under threat of losing this freedom. I also showed how the EFF texts worked in the three dimension of frame resonance: narrative fidelity, empirical credibility, and experiential commensurability. In particular, I showed how the EFF's frames appeared limited in terms of narrative fidelity and experiential commensurability. While the EFF claimed to represent a movement of all Internet users, these two dimensions of frame resonance displayed a greater focus on the cultural values and experiences of more specialized and technically advanced communities, such as hackers, security researchers, and legal experts.

Second, I found that the EFF texts primarily relied on motivational frames of *individual efficacy* to mobilize support and action. Overall, this framing strategy, rather than building

solidarity among a broad community of activists, appeared to individualize participants and limit their target audiences to more elite social groups. In this way, the Digital Rights movement appears to have latently reified some pre-existing social inequalities by being more accessible to more privileged groups in society, as has been warned by critical technology scholars (Fuchs 2011; Morozov 2011). My observations of the demographic characteristics of participants at the EFA meetings were consistent with this conclusion. Third, in my observations I found that through the EFA network, DR activists attempted to address this disparity through a practice I call *strategic inclusivity*. Specifically, they developed and shared organizational strategies and practices to magnify their frame resonance and increase the diversity of the DR activist community, including utilizing accredited experts to educate other DR activists about inequalities and to lead training workshops and mobilization efforts targeted towards minority and low-income populations.

Meanwhile, the more radical and informal Anonymous collective took a very different approach toward frame resonance. First, the AnonNews texts used the frame of *freedom of speech* as their core motivating value and principle that connected their activities across all their campaigns and protest cycles. Their framing strategy also worked to achieve resonance in terms of narrative fidelity and experiential commensurability, but not empirical credibility. For instance, the highly frequent use of populist phrasing like "we, Anonymous, the people" showed their attempt to resonate with the experiences of everyday people by identifying themselves with the masses or as the *vox populi*. Further, by emphasizing a civil and human right, rather than an exclusive technology like the EFF, we can see how Anonymous seems to have sought a relatively wider cultural and ideological frame resonance.

Second, the Anonymous texts also utilized a framing strategy of *collective efficacy.* This strategy likewise worked to rhetorically draw people to their cause by emphasizing collective solidarity, unity, and strength. This concurs with previous research that has similarly shown that collective identity is crucial for the Anonymous collective, especially in the absence of formal infrastructure or leadership (Beyers 2014; Coleman 2011, 2014; Goode 2015; Landers 2008; McDonald 2015). Third, these ideas were further supported by my observations at the MMM which found that Anons utilize *communities of anonymity* in practice in order to create a space in which all participants can voice their views equally. For example, Deseriis (2013:41) argues that Anonymous' collective identity is a form of political technology that "allows those who do not have a voice of their own to acquire a symbolic power outside the boundaries of an institutional practice." While Anonymous is known for this practice online (hence their name), they extend it in person as well such as through the wearing of identical masks. However, while its commitment to absolute equality and openness allows for greater accessibility and diversity of participants, I observed that this unregulated promotion of freedom of speech, along with its reliance on unorganized crowdsourcing, also resulted in a high degree of frame competition and conflict around specific issues. Such discord is likely to impede their frame resonance among external audiences beyond their core constituency. For example, as I noted in Chapter 6, an observer of the MMM replied to one of the Anon protester's chanting with confusion, stating "But what are you trying to accomplish here today?"

Chapter 6 analyzed how the framing processes of these movements are shaped by digital space. Due to the obstacle of problem recognition which limits the reach and resonance of their collective action frames, I showed how these activists in digital contention formed specific framing strategies and practices to broaden their frame resonance. While DR and ANON each

worked towards frame resonance in different ways, with varying levels of inclusivity and exclusivity, both showed a notable proclivity towards motivational frames of efficacy. In the following section, I explore the significance of this pattern further by connecting my findings from Chapters 5 and 6 in the broader implications of digital space.

Significance

The findings of this dissertation are significant for the study of social movements, digital technology, and Internet policy in a number of ways. First and foremost, I have argued that this project makes a valuable contribution to the field of social movement studies by bringing attention to and providing evidence concerning the influence of digital space on collective action dynamics. In doing so, this work attempts to push beyond the narrowly instrumental view of the digital realm as a mere set of tools which dominates much of the current body of literature. I treat the Internet as a unique space with its own history, culture, and structuring influences, just as many previous scholars have treated physical spaces (e.g., Davies 2012; Foucault 1984; Lefebvre 1974; Leitner et al. 2008; Tilly 2000). Through my cases, the Digital Rights movement and the Anonymous collective, and the phenomenon I call *digital contention*, I show how the perception of political opportunities and threats, as well as processes of framing and frame resonance, are shaped by the context of digital space.

Few previous researchers have empirically examined activists so deeply embedded in digital space. By exploring this gap, I have discovered new dynamics in the ways social movement actors operate. Considering all of my findings together, we can see that these activists in digital space not only perceived opportunity less and threat more, but also appeared to combine frames of threat particularly with motivational frames of efficacy to mobilize followers to action in the absence of political opportunities. Benford (1993) speculated that "vocabularies

of motive" could interact in different ways, but the prevalence of this combination of threat and efficacy in digital space is something new. In Benford's theory, the four vocabularies of motive need to be in balance, otherwise activists would face "framing hazards" that could immobilize action (1993:208). For instance, if a problem is framed as excessively severe then movement actors may feel overwhelmed and helpless to change anything. Similarly, he stated that too much efficacy can diminish the perceived severity and urgency of a problem. Yet, for both the EFF and Anonymous, I found that frames of efficacy far outweighed any of the other three vocabularies of motive with no evidence of this leading to demobilization. It is possible that, in the absence of political opportunities, the increased prevalence of perceived threats in digital space makes frames of efficacy more necessary.

It is also possible that in digital space, there is less of a need for the four vocabularies of motive to be in balance due to the nature of the space. Activism in physical spaces can be demanding and costly, especially to sustain a movement over a long period of time, thus the risk of immobilizing action is great. In digital space, activists do not face the same risks of immobilization that are faced with physical spaces. This is because, as discussed earlier, the costs of action can be greatly reduced by the affordances of the Internet (Earl and Kimport 2011). In digital space, activists do not need to be co-present at the same time and place to participate. They can contribute with ease from their own homes or from far away countries. Furthermore, Benford (1993) pointed out that movement actors can overcome framing hazards by redefining the costs of action as successes or badges of honor. Since the costs of action can be lowered by the affordances of digital space, movement actors may also have greater flexibility in redefining those costs, such as through frames of efficacy. Therefore, digital space not only changes the way political opportunities and threats are perceived, but also enables activists with

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greater ability to overcome the framing hazards that Benford predicted could hinder traditional offline movements.

Although some scholars have previously argued for the importance of understanding collective action *in* digital space (e.g., Calhoun 2007; Castells 1996, 2015; Lim 2014, 2015; Lindgren 2013; Martin and Miller 2003), these specific movement dynamics have received scant attention in regards to how they may be affected *by* digital space. Additionally, Earl and Kimport (2011) pointed out that purely online forms of activism, or "e-movements," are vastly underrepresented in the movement literature. Most of our social movement theories have been developed based on older, more traditional offline forms of collective action. Therefore, this work contributes theoretically valuable findings to our overall understanding of how social movements can operate.

This research is also significant precisely because of the space in which it takes place. Currently, a profusion of research on digital technology and media is being produced across many fields of study. Numerous scholars have come to recognize its importance at every levels of our social and political reality. In some ways, the Digital or Information Revolution, for better or worse, may be reshaping all of society as significantly as did the Industrial Revolution a century ago. In fact, it was these social changes brought on by widespread industrialization which helped give birth the discipline of sociology in the first place. Technology is poised to continue to develop and spread even more into every facet of our lives. What is today considered technological expertise and elitism, or deep emersion in digital space, may in a generation or two be seen as merely average. Thus, these activists engaged in digital contention may well foreshadow the type of changing dynamics that will one day affect all forms of collective action.

My cases provide a good example of this transformation because they represent those people most deeply embedded in and shaped by digital space. They were the first activists in digital space, but they certainly will not be the last. In some ways, they have created the model for digital activism which other movements will have to follow as they migrate more and more into digital space and use this technology. It was early hackers in the Digital Rights movement who first fought to establish free speech protections in digital space decades before Facebook and Twitter were invented. It was Anonymous hacktivists who pioneered the tactics of digital sit-ins which are now being used by everyone from K-Pop fans to Black Lives Matter activists. Whether they are aware of it or not, digital contention has set the rules for all the digitally enabled activism that has come afterwards. It is significant because digital space itself is becoming more significant. For example, the COVID-19 pandemic of 2020 has revealed just how crucial digital space is when physical space is threatened. It is not a replacement for physical space, but a vital supplement. Even the activists of digital contention still understand the need for physical spaces, as can be seen in the EFF's presence in courtrooms and Anonymous' annual Million Mask March. But digital space, with its own new dynamics, affords an unprecedented level of connectivity and participation in collective action across the globe in addition to that which exists in physical spaces. Thus, it is important for scholars to recognize the importance of digital space and the contributions of the movements of digital contention, even as we may critique them for their varying levels of inclusivity and exclusivity.

Moreover, as I noted earlier, the outcomes of digital contention will ultimately impact all people, not just activists. Even those who are not regular Internet users and members of digital culture are still affected by this technology. Major events like the Edward Snowden NSA leaks, the Cambridge Analytica scandal, and more have brought increased attention to the problems and

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risks of surveillance capitalism. Many governmental bodies are beginning to devise new ways to regulate digital space, technology companies, and the state. For example, in 2018 the European Union implemented the General Data Protection Regulation (GDPR) which is the first move to classify citizens as "data subjects" and attempt to protect individual user data from surveillance and exploitation. While this is only a first step, it is a crucial moment in history right now. How societies decide to move forward in defining and addressing these issues will determine the digital civil and human rights for all people in the future. In many ways, digital contention represents the grassroots fight to influence our attitudes and perceptions towards recognizing digital rights and freedom on the Internet. As noted earlier, Lessig (1999) argued if the people do not exercise their agency over technology to shape it in ways that benefit society and are consistent with our democratic ideals, then that technology can be turned against us to constrain and regulate our behavior in undemocratic ways. The activists in digital contention are attempting in their own way to exercise that agency, and to convince the rest of us to stand up and express our own agency as well.

Limitations and Future Directions

This analysis is not without its limitations, of course. First, the texts of the AnonNews statements were generally shorter than the EFFector newsletters. Thus, while the samples were proportionally equivalent, size of the corpus for the texts of Anonymous was smaller than that of the EFF, which reflected in the semantic networks. The networks of the EFF showed more patterns of language and mental mapping. While a larger sample of texts could potentially reveal more or be more representative quantitatively, I am unsure if such a thing is possible since the original archive from which the AnonNews texts were drawn no longer exists, at least publicly. Second, and perhaps most importantly, a similar study of this nature should be carried out on

offline movements to verify that they in fact do reference opportunity more frequently than

threat. It could be argued that this analysis samples on the dependent variable by not having

similar comparative data for offline movements to support its claims. The approach of this study

was not to directly compare data from online and offline movements, but rather to compare what

I observed in these online movements with existing theories of social movement dynamics which

were originally formed with only traditional offline movements in mind. I believe this analysis

makes its case; however, additional analyses of offline movements could still make for a useful

comparison. The third limitation is the time range of my analysis (2009-2012). This period was

fertile with many major events for digital contention, but my findings may not be extendable to

the same movements at other times. For example, shortly after the period of this study came

Edward Snowden's famous whistleblower leaks about the NSA in 2013, which likely had a

major influence on frame resonance.

There are many other avenues for future research to build upon the findings of this

dissertation as well. As I discussed in the Introduction chapter, this dissertation examines digital

contention in a very specific and limited form. However, it is possibly to apply this concept in a

wider sense to varying degrees. For example, online activist movements like #MeToo, extremist

movements like the alt-right, and even malicious hackers creating and disseminating

disinformation and "fake news" online could all be thought of as engaging in some form of

digital contention to a greater or lesser extent. It may be possibly to expand the concept of digital

contention by developing a typology of each of these different forms. Such a typology could be

informative in finding similar patterns in how digital space influences collective action

dynamics, as well as help researchers not to conflate these different activities. For example, I

have often witnessed even educated academics casually speaking of Anonymous hacktivists and

alt-right trolls as if they are the same thing. Greater conceptual distinction between variations in the phenomenon of digital contention could potentially be of great use to many.

Other venues of future work could build upon the empirical findings of this dissertation. One possibility would be to incorporate a temporal dimension into the analysis by examining how perceptions of threat and opportunity vary over time within each movement. Is there a pattern in how these change across cycles of protest? This type of analysis could also enable a closer look at radical flank effects by comparing the changes over time between the two cases. Does a change in the perception of opportunity or threat in ANON directly influence the DR movement, or vice versa? My findings did not discover any direct communication or relationship between the perceptions or frames of the two movements, but a closer time-ordered analysis may be able to reveal more detail.

Another possibility is to look closer at additional factors around the digital divide and the knowledge gap. While this dissertation found evidence to support the idea that elite and privileged social groups are overrepresented in the DR culture and community of activists by studying the activists themselves, additional research could analyze the audiences for these frames in order to understand how effectively they resonate, and among whom. For example, how might the framing of issues of digital contention resonate among different generations or age cohorts? On one hand, some have described the issues of digital contention as part of a new generational identity. According to one Net Neutrality advocate, Marvin Ammori, "For the millennial generation, taking away an open Internet is like, for an older generation, taking away Social Security or Medicare—or for some people in the red states, taking away their guns" (quoted from Sasso 2015). On the other hand, many younger Gen Z Internet users may be more acclimated to digital technology and desensitized to privacy and surveillance issues. More

precise measuring of the effects of the second-level digital divide and knowledge gap could potentially reveal significant findings concerning the development of digital contention in the future. Furthermore, it would be timely to look at how Anons are perceived by outside groups which they support, such as the Black Lives Matter protesters. Are they seen as allies or detractors? Is their support valued or understood as merely performative solidarity? Given the current reemergence of Anonymous in support of the 2020 anti-police brutality protests after three years of relative inactivity, the relationship between Anonymous and Black Lives Matter is especially interesting and worth further study (see Wright et al. 2019).

Last, additional research focusing on the policy side of digital contention is necessary – in particular, work on the effects of DR and ANON mobilization on policy formation. While the DR movement appears to have direct interaction with the policymakers on many levels, how effective are their campaigns in the policy arena? For example, even after the campaign to pass Net Neutrality achieved success in 2015, the ruling was reversed under the next administration in 2016. So, does this activism directly produce any meaningful results? Future work could comparatively analyze individual campaigns and their outcomes across multiple DR organizations to find out precisely what factors lead to some campaigns being more successful than others. Further, I suspect that ANON, whose protests tactics tend to be more radical and confrontational, may actually have a counter-effect. That is, do Anonymous campaigns influence policy changes in the directions intended, or do they instead bring more attention to the need for increased cybersecurity and the criminalization of hacktivism? Do states co-opt the tactics of hacktivism for their own goals? These are just a few examples of work that may be inspired by this dissertation. The phenomenon of digital contention is one that I believe will only continue to grow in importance as time goes on, and as a field of study there is much to be done.

APPENDIX A. QUALITATIVE CODEBOOK

EFF Codes	Example (quote from data)
Alliances	EFF joined dozens of other civil liberties and labor groups in urging Congress to uphold worker privacy and reject the Legal Workforce Act.
Collective Action Frames	
1. Diagnostic	If there's one thing that encapsulates what's wrong with the way government functions today, ACTA is it. You wouldn't know it from the name, but the Anti-Counterfeiting Trade Agreement is an agreement designed to broaden and extend existing intellectual property enforcement laws to the Internet. Both in substance and in process, ACTA embodies an outdated top-down, arbitrary approach to government that is out of step with modern notions of participatory democracy.
2. Prognostic	It's time for Warner to take some responsibility and stop the censorship. The best thing would be for Warner to go back to how it treated videos before. At a minimum, Warner should assure YouTubers that the company won't escalate straight to lawsuit after a content ID takedown is disputed without first availing itself of the DMCA takedown option.
3. Motivational	Click here to email your congressperson today -- a message from you, opposing PATRIOT extension and demanding that Congress pass the reforms contained in the JUSTICE Act, could make a critical difference. Help EFF defend civil liberties and stop Congress from rubber-stamping the PATRIOT Act!
Vocabularies of Motive	
1. Efficacy	This month's historic protests against the Stop Online Piracy Act (SOPA) and the Protect IP Act (PIPA) made clear just what the tech community and Internet users are capable of accomplishing when they act together.
2. Propriety	As we discuss the future of the Internet, all stakeholders -- including the people who use Internet services and consume, create, and share movies and music -- must have a seat at the table.
3. Severity	The Internet is too important to be debated, dissected, and possibly disabled in a private meeting.
4. Urgency	Now is the time to show your support for balanced copyright laws.
Diversity and Inclusion	Every major country in the ACTA negotiations claims that its own laws will remain unchanged by the treaty. But without changing a word of domestic law, ACTA can still be dangerous to a country's or a continent's economy. We asked guest bloggers from around the world to give their perspective on the trade agreement.
Digital Tools	EFF has a long-term mission to encrypt as much of the Web as possible -- in fact, to encrypt all of it. We have been making quite

	a lot of progress. HTTPS Everywhere, the browser extension we produce in collaboration with the Tor Project and an awesome community of volunteers, is now used by more than 2.5 million people around the world. We released version 3.0 of HTTPS Everywhere, which adds encryption protection to 1,500 more websites, twice as many as previous stable releases. Our current estimate is that HTTPS Everywhere 3 should encrypt at least a hundred billion page views in the next year, and trillions of individual HTTP requests.
Education	A Field Guide to Copyright Trolls: With all of this talk about copyright trolls and spamigation, it is easy to get confused. Here's a concise guide to copyright trolls currently in the wild, with status updates.
Frame Resonance	
1. Narrative Fidelity	Our campaign to Defend Innovation isn't just about our proposals -- we want to hear, and amplify, the views of the technical community.
2. Empirical Credibility	Whether it's attacks on coders' rights, overreaching copyright claims online, or governments' efforts to censor or spy on people, EFF is often the first place people turn to for information about troubling events online.
3. Experiential Commensurability	EFF frequently recommends that Internet users who are concerned about protecting their anonymity and security online use HTTPS Everywhere for encrypted communications with many websites and Tor for protecting online anonymity. But the best security comes from being an informed user who understands how these tools work together to protect your privacy against potential eavesdroppers.
Ideology	Instead, we're advocating for what's best for the Internet and Internet users, and while we are flexible, we aren't willing to horse trade with your privacy and due process.
Internet Freedom	leaders who are extending freedom and innovation on the electronic frontier.
Opportunity	
1. Stable	Recent political protests in Iran, China, and elsewhere have demonstrated the enormous power of the Internet for organizing protests and reporting events to the world.
2. Volatile	Congress voted at the end of February to extend the expiring provisions of the USA PATRIOT Act, but only for three months -- giving liberty-loving citizens a new opportunity to continue to protest this dangerous law and demand the passage of meaningful PATRIOT reform before the end of May.
Organizational Maintenance	Our birthday fundraiser on February 10th will celebrate two decades of digital freedom-fighting
Self-Identification	Adam will present a unique look back and forward to EFF's founding and the future of digital rights.

Threat	
1. Current	There's a new bill working its way through Congress that is cause for some alarm: the Cybersecurity Act of 2009 risks giving the federal government unprecedented power over the Internet without necessarily improving security.
2. Repressive	N/A

ANON Codes	Example (quote from data)
Audience	Dear citizens of the world,
Collective Action Frames	
1. Diagnostic	The spirit of repression and resistance following the latest Wikileaks event shows the global powerbroker's insatiable appetite to do everything they can to preserve their power, often behind closed doors.
2. Prognostic	Responsible citizens around the world should decide now whether they want to rely on those who believe the world is safer if the public is kept in ignorance, or on advocates of freedom of speech and transparency like ANONYMOUS and Wikileaks.
3. Motivational	If no one protects our interests, then we, the people, will protect our interests. For we are not brain dead like they expect us to be. For we believe in society. We believe in ourselves and we believe in you. We, ANONYMOUS, the people, are always one step ahead. Because we are young, alive and intelligent. Their corporate corpses may try to stop us, but they are afraid of us. We, ANONYMOUS, the people, can win back our basic rights - and we will try until we have succeeded. For true democracy.
Vocabularies of Motive	
1. Efficacy	You cannot hide; we are everywhere. We cannot die; we are forever. We're getting bigger every day--and solely by the force of our ideas, malicious and hostile as they often are. If you want another name for your opponent, then call us Legion, for we are many.
2. Propriety	Please take up your personal responsibility and join the hive!
3. Severity	The future of the internet hangs in the balance.
4. Urgency	The time to act is now.
Capacity	Ever since our recent victories, and subsequent defeat in campaigns against Visa, Mastercard, PayPal, and Amazon, our engineers have been working tirelessly on the open source Low Orbit Ion Cannon project. Our aim is to create a new marque weapon that is truly decentralised, ever evolving, untraceable and more powerful than any of the similar tools that preceded it. Such work is now complete.
Diversity and Inclusion	The channels where this will be carried out and organized are #Hispano for Spanish speaking Anons and #Leysinde for English

	and French speaking Anons, and those speaking other languages, around the world.
Frame Bridging	To the Algerian people: We stand together and united against this oppression. This struggle is not just for you alone, but for the whole of mankind.
Frame Extension	We are you, and you are us. We are the masses, and the masses are us.
Frame Resonance	
1. Narrative Fidelity	Anonymous is your brothers and sisters, your sons and daughters, your parents and your friends, regardless of age, gender, race, religion, ethnicity, or place of birth. Anonymous is you. You will not be denied your right to free speech, free press, free association and your universal right to freely access information, both in real life and through the internet.
2. Empirical Credibility	N/A
3. Experiential Commensurability	This is a call to arms. This is a call for the freedom fighters. For the outliers. For the forgotten. This is a call for intellectuals. A call for journalists. This is a call for free thinkers. A call for the intelligentsia. This is a call for poets. A call for the strong. And a call for the weak. This is a call to the youth. To the wise. To the clever.
Freedom of Speech	Free Speech is the most fundamental of your fundamental rights. Once you lose it, you won't have the means to complain when politicians come back and destroy your wealth, your health, your soul, your ideals, your hopes, your projects, your whole life. Free Speech is the freedom that protects all freedoms.
Ideology	Knowledge is free.
Opportunity	
1. Stable	For the first time in history, we, the people, have the power to establish true democracy.
2. Volatile	Thank you, Al Jazeera, for your outstanding coverage in the streets of Egypt. Your constant reporting and unbiased journalism has helped unite the revolutionaries, and the world.
Self-Identification	We are Anonymous. We are Legion. We do not forgive. We do not forget. Expect us.
Threat	
1. Current	The trap of international censorship is desperately trying to swallow the Internet… If censorship wins the war, Free Speech will be put in its death-bed, if not killed outright.
2. Repressive	Scientology's use of their infamous 1965 "Fair Game Law" or the recent phishing activities of the Tunisian government and the subsequent disappearance of at least two political dissidents in the same country, show once more that the protection of personal information is not just a luxury, but a necessary precaution to defend oneself in the struggle for human rights and dignity.

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